

Briefing to the Incoming Minister

Your Guide to Opportunities and Challenges in the
Transport System

2020



Ministry of **Transport**
TE MANATŪ WAKA

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Foreword

Tēnā koe Minister, and congratulations on your appointment as Minister of Transport.

Transport supports the wellbeing of New Zealanders by making possible many of the social, economic and environmental outcomes New Zealand wants to achieve.

The COVID-19 pandemic has had a huge impact on the transport system. Most of the system proved to be resilient and adaptable, but parts, like the aviation sector, are under acute stress and need support to protect crucial international connections. Keeping essential transport services going and managing the border will likely be a priority for you in the first part of your term. Decision-making will take place in an environment where recovery and response measures need to be implemented at the same time. There will also be uncertainty caused by the risk of possible outbreaks of the virus that could see alert levels move up and down. Reopening and reconnecting to the rest of the world safely will also be a vitally important objective over the next 18 months or so. COVID-19 is the first topic in this BIM.

Over and above the immediate realities of COVID-19, New Zealand's transport system faces several major challenges over the medium to longer-term. Several key reforms or new demands are being managed at the same time. Your approach to them will have a lasting impact. Some challenges reflect the critical and enabling role transport has across government priorities, and the amount of concurrent change and reform. These challenges range from: reducing transport emissions to meet the target of net zero carbon by 2050 to supporting sustainable growth in our cities. Some of these challenges are long term like climate change but require near-term decisions to bring about long-term outcomes. Others involve solutions with long lead times, like changes in land use and urban design, but the earlier we start, the earlier we will see results. This BIM discusses the scale and scope of these challenges, including how COVID-19 has shaped, amplified and influenced them.

While the challenges may appear large and daunting, there are many opportunities for you to lead and influence the transport system to make a real difference to the wellbeing of New Zealanders. In our role as system lead, we look forward to giving you the advice, support and rigorous evidence needed to put your priorities in place.



Peter Mersi
Secretary for Transport



Your Role as Minister of Transport

As Minister of Transport, your main roles are:

- setting and achieving your priorities through shaping policy, funding and regulatory settings
- managing the Crown's relationship with the Crown transport entities, including setting their strategic direction and appointing members to their boards
- setting government transport investment priorities, both for delivery and over the medium and longer term, through the Government Policy Statement on land transport, the New Zealand Rail Plan and government budgetary processes
- representing central government in arrangements with local government on transport priorities in their areas, such as the Auckland Transport Alignment Project [ATAP]
- part responsibility for managing the Crown's relationship with State-owned enterprises with transport functions: Airways Corporation of New Zealand, KiwiRail Holdings, and Meteorological Service of New Zealand [Metservice]
- responsibility for maritime security
- administering the Crown's international air services agreements and licensing international airlines for the routes and capacity they can operate
- administering the Crown's public weather forecasting contract with the Metservice
- administering the Crown's interest in six regional airports, which are joint ventures with local authorities
- exercising various statutory powers and functions [the Ministry administers 21 Acts of Parliament and numerous secondary legislation].

The Ministry of Transport

The Ministry of Transport is the Government's lead advisor on transport, and the transport system's lead. This role includes:

- advising on legislative, regulatory, and policy settings
- leading transport's medium and longer term planning
- advising on transport investments, and overall funding levels and priorities
- Crown agency governance, appointments, performance and accountability, as well as the purchase of programmes
- operating Milford Sound Piopiotahi Aerodrome.

Through our advice, we aim to:

- improve the overall performance of the transport system
- achieve better value for money for government from its investment in the transport system
- improve the performance of Crown transport entities.

We also represent government's transport interests internationally, particularly in aviation and maritime.

Being a small policy agency of around 180 people places discipline on the Ministry to work in close partnership with others and focus on its system role. There are strong incentives on the Ministry to be effective at planning and co-ordinating execution through the transport agencies, and to get value from system-wide activities.

An important example of this is the Transport Outcomes Framework, which has become critical for creating joined-up plans and delivery in the transport system, and for measuring results. Others include our Regulatory Stewardship Plan, and the work that has been done to articulate and manage the policy levers available to you as Minister, work on medium-term mezzanine strategies and the new Generational Investment Approach that looks at long-term trade-offs and choices.

Another important role for the Ministry is to have innovation and technology work programmes in place that encourage the rapid uptake of new technology and new business models to deliver on transport outcomes. This involves building an understanding of any barriers to innovation, and providing advice on how to fill any gaps. As well, the Ministry needs to understand the potential of emerging transport technologies, including both its potential benefits and possible disadvantages. This work involves collaboration with other government agencies, the private sector and academia.

The Ministry is continuing to develop its capability, including to manage an increasing level of spend through Vote Transport. There is \$8.4 billion in Vote Transport this year, up from \$3.6 billion in 2016/17. As a consequence, the Ministry has enhanced its purchase and commercial capabilities to support you in your purchase role.

During an emergency, transport links must be maintained to link communities. The Ministry has a statutory emergency response role for the transport sector under the Civil Defence Emergency Management Act 2002. The Ministry operates a Transport Response Team that co-ordinates activity across the transport agencies and with others. We will provide separate advice on the support that is available for you as Minister in the event of an emergency.

Ministry of Transport's Senior Leadership

Peter Mersi
Chief Executive
Secretary for Transport



System & Regulatory Design

Kirstie Hewlett

Deputy Chief
Executive System &
Regulatory Design



Karl Simpson

Director [System &
Regulatory Design]



- TEAMS**
- Economic Regulation
 - Environment, Emissions & Adaption
 - Mobility & Safety
 - Regulatory Policy
 - Resilience & Security
 - New Zealand Search & Rescue

System Performance & Governance

Brent Johnston

Deputy Chief
Executive Governance
& Commercial



Paul Laplanche

Chief Financial Officer



Joanne Leung

Chief Economist



- TEAMS**
- Analytics & Modelling
 - Business Integrity & Performance
 - Domain Strategy, Economics and Evaluation
 - Finance
 - Governance & Commercial
 - Minister's Office Staff

System Strategy & Investment

Bryn Gandy

Deputy Chief Executive
System Strategy & Investment



Karen Lyons

Director [Auckland]



Professor Simon Kingham [University of Canterbury]

Chief Science Adviser



Siobhan Routledge

Director [System Strategy
& Investment]



- TEAMS**
- Auckland
 - Demand Management & Revenue
 - Investment [including the GPS]
 - Placemaking & Urban Development
 - Strategic Policy & Innovation
 - Supply Chain , Freight & Rail

Corporate Services

Robyn Smith

Deputy Chief Executive
Corporate Services



- TEAMS**
- Business Support
 - Digital & Knowledge
 - Engagement & Communications
 - Human Resources
 - Legal

Overview

Transport is an enabler

Transport enables New Zealanders economic and social opportunities. But the system was designed for a country with fewer New Zealanders, and policy makers had a narrower view of the outcomes transport could influence. More is now expected of the system, and there is much greater awareness of how transport affects productivity and connects people. But transport also has negative consequences to address like sprawl, deaths and injuries, congestion and emissions.

Transport emissions are increasing when they need to fall. It may be too late for the simplest options to get results soon enough. Meeting the increasing demand for transport infrastructure and services is getting harder. There are safety issues, especially in the road system, where there are too many deaths and injuries. COVID-19 has re-ordered existing priorities across the system, including deepening challenges to economic and social mobility. Work to meet many of these issues is underway, and it is both a challenge and an opportunity that transport has a number of changes and reforms underway.

Opportunities to shape the system

The transport system needs to be shaped so that it supports inclusive economic growth and provides sustainable and safe networks for people, businesses and freight. As Minister of Transport, you have many opportunities to shape the system through your investment and regulatory choices. Establishing your priorities for investment and the regulatory system will be a central focus of your portfolio for the next three years, and there will be hard choices to make. However, there are resources and the statutory National Land Transport Fund (NLTF) is a significant and stable

source of funding for meeting your priorities, even though demands will always exceed it.

We anticipate you will want to see substantial progress during the term of government. This may include the previous Government's significant transport investment and regulatory programme, and broader priorities for reform such as to the Resource Management Act. Meeting the ongoing demands of COVID-19 are significant for transport and could last the full three years. Reopening borders, re-establishing international connections and providing support are immediate priorities to mitigate the effects of any economic slow-down and support economic and social recovery. Handling response and recovery at the same time is demanding and resource intensive and requires fluid work programmes.

The Ministry is among the smaller government agencies, and we will work with you to establish your priorities and how we can best support you to stage them over the term.

Taking a long-term view

Your choices in cities may include costly new infrastructure, which can be very complex to build in urban environments, and demand management measures like congestion pricing. The right measures will have a positive impact across the transport outcomes, with larger benefits than costs, but gaining public support for some measures may be difficult. Regions also need resources. For economic growth and social inclusion, regions need connectivity and resilience, and their crucial networks and services need to be maintained.

While we cannot make the choices for you, the Ministry has been developing approaches and tools that will assist you. System planning, as currently set up, has a short to medium-term focus. However, most transport projects have long-term consequences, and their benefits may not be realised until well into the future. The transport

outcomes framework and indicators, more use of strategies that bring people and policy levers together around common objectives, and emerging new longer-term approaches to system planning will be crucial to better decision making and outcomes. This includes a new way of thinking about investment choices 30-50 years out, which we are developing alongside the Infrastructure Commission.

Taking a longer term view will help where the Government considers joint arrangements with local government over the transport needs in their regions. These arrangements help to align central and local government objectives and funding. There are good existing examples, such as the Auckland Transport Alignment Project (ATAP), which you lead with the Mayor of Auckland, and work on the Auckland to Hamilton corridor. You will need to consider whether this approach should be extended to other places.

There is also a significant stream of cross-government work on the reform of the resource management system. This work will have major implications for the land transport planning and funding system. Better spatial planning is an important objective. We will support you in this, but it will involve a large effort.

A new revenue system

We are also working on advice on how to fund and finance the large scale urban transport projects. These projects can be highly effective in encouraging people to use public transport, enabling them to get quickly and reliably between where they live, work and socialise, and in reducing congestion and emissions. However, these projects can also play a central role in shaping urban form and attracting development – and so their objectives go beyond the usual role for transport funding. Funding them requires innovative approaches, working across government, and sorting this out is pressing.

We are also beginning work on how you might change the way we collect revenue to fund the transport system New Zealand wants. The system works pretty well, but there are growing problems and we need to start now because deciding on a new system will take time and effort, needs extensive public engagement, and any solution needs to be implemented well.

Reducing emissions

Meeting the new goals of the Climate Change Response Act 2002 will be a priority for your Government, and there will need to be major and long term adjustments made by all parts of the transport system. This will require leadership by government, consultation and close collaboration with industry, and consideration of a wide range of policy levers across light and heavy vehicles.

Better supply chains

There are opportunities to take a better approach to New Zealand's supply chains. With significant government support the supply chain has weathered COVID-19, although there are fragilities. As well as the impacts on air freight, COVID-19 impacts are still working their way through the maritime sector, and there could be direct and indirect consequences in the medium-term on that sector from shifting patterns of demand in international freight markets. The sector will have to navigate several challenges over the next decade, including a recession and recovery, and decarbonisation. Building a strategy for the supply chain sector would help to provide certainty and allow the system to operate at its best as a fully integrated, multi-modal system. As well, a closer relationship between government and industry could help to revitalise the freight system and be a central plank for an enduring freight strategy.

A safer and more secure transport system

Safety and security is an essential part of the transport portfolio. Deaths and injuries have significant social and economic costs. Regulatory capacity needs to be improved and, while there is a road safety strategy in place, a sharp focus on implementation and monitoring is needed to make sure the strategy delivers. Several events have demonstrated the need for increased focus and investment in the security of the transport system and the maritime security domain.

Uncertainty and disruptive events

Implementing your priorities will take place in an environment of unprecedented uncertainty. COVID-19 is the most recent of a series of large events, both natural and human made, that have disrupted the transport system. While transport has generally proved adaptable, and there are good response systems in place led by the Ministry, such events up-end priorities and absorb resources. Another unexpected large-scale event on top of COVID-19 would severely test the system's capacity to adapt. In the meantime, flexibility and the ability to pivot quickly between response and recovery is needed, especially if there are further outbreaks of the virus.

Part A: COVID-19 and the Transport System

Responding and recovering from COVID-19

Key points

- COVID-19 had a severe impact on activity in the transport system, but the system proved adaptable, was mostly resilient, and has recovered in many areas. However, the aviation sector will be adversely affected for some time, and recovery will take longer for public transport operators and transport operators in the tourism sector.
- There will be a mix of work on responding to the immediate consequences of COVID-19 and its associated public health measures and work on the longer-term recovery of the transport system as part of New Zealand's overall recovery. A fluid work programme is necessary because the Ministry and agencies need to mobilise resources at short notice to deliver response work.
- The Ministry is working with other agencies on how transport can support recovery from COVID-19, including reopening the border safely which is critical to recovery. The Government's direction for the economy through recovery will shape this work.
- A focussed, strategic plan is needed for the aviation sector, recognising that the sector is a key economic driver for recovery, and will need more support over the short to medium term.
- In the short term, the pandemic is:
 - placing financial pressure on transport services, operators and revenue, especially in the aviation and tourism sectors
 - worsening the transport disadvantage faced by some people and places
 - placing financial pressure on the regulatory system and on transport operators, potentially leading to pressure to "cut corners" to cope with challenging economic conditions – this strengthens the need for regulatory vigilance and well resourced regulators
 - highlighting resilience issues in the supply chain that need to be managed and monitored.
- Over the longer term, depending on choices made, the pandemic may:
 - require more effort to incentivise decarbonisation of transport than would have been the case
 - continue to exacerbate transport disadvantage
 - make it more difficult to pay for transport infrastructure and services, if transport demand and economic activity are lower, because of reduced revenue.
- COVID-19 may also create opportunities, such as capitalising on the shift to people working from home and making good use of stimulus investment to further transport outcomes.

COVID-19 had a dramatic short-term impact on transport, and has amplified pressures in the system

In a normal year, many millions of people and many millions of tonnes of freight move around New Zealand by air, rail, road and ship. The transport sector contributes to around five percent of New Zealand's gross domestic product and is a major employer of New Zealanders. However, it is a much larger contributor to GDP in reality given that the sector impacts a large number of down stream businesses (imports and exports) and upstream businesses, which rely on the sector.

The COVID-19 pandemic has had a major impact on levels of activity in New Zealand's transport system. While some parts of the system need government support to keep going, New Zealand's transport system proved adaptable, resilient and served the needs of New Zealanders well

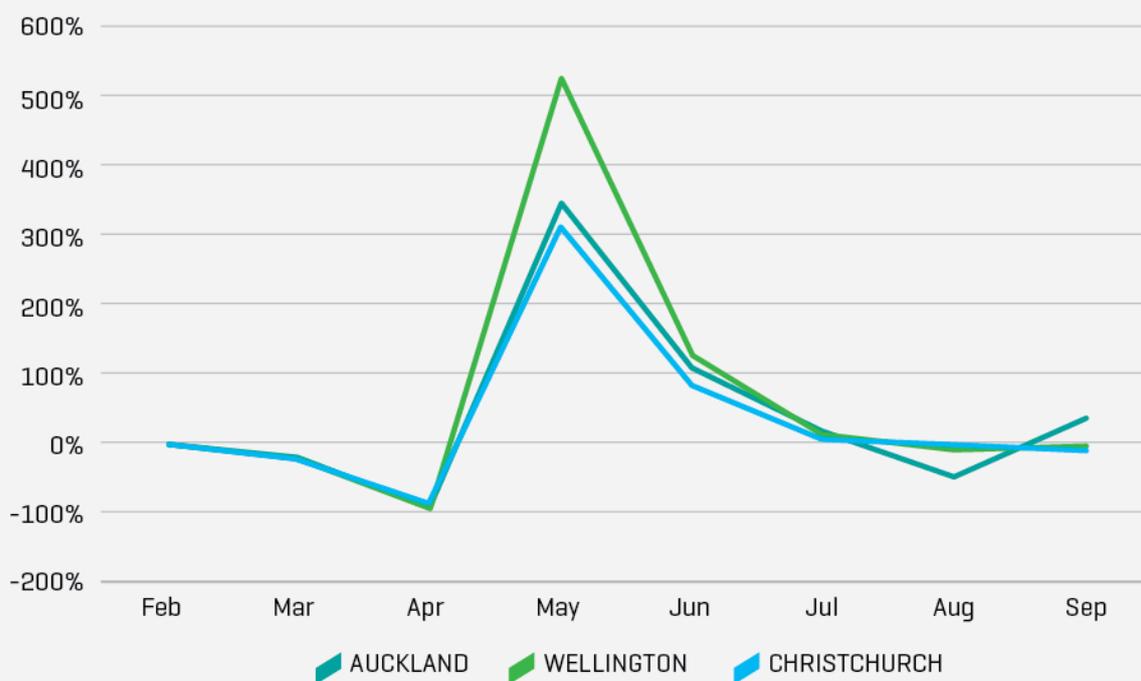
throughout the different alert levels, including the Level 4 lockdown.

Public transport patronage may take longer to get back to pre-COVID-19 levels given more working from home, reduced educational and business activity in city centres, a preference by many people to commute by private vehicle, and a wariness about using public transport due to concern about exposure to COVID-19.

Physical distancing challenged the financial viability of public transport and aviation operators. Removing the Alert Level 2 physical distancing requirements on public transport and aviation in August and September 2020 has been crucial for the recovery of these operators and needs to be maintained.

While necessary for public health reasons, the combined effects of the continuing border closure and the reduction of domestic travel through lockdowns and social distancing caused severe reductions in revenue for many transport

Change in monthly bus patronage for Auckland, Wellington, and Christchurch [%]



operators, particularly for airlines, airports, and aviation, rail and maritime tourism operators. Border closure also had serious downstream impacts for many of the exporters and importers who are reliant on air freight. However, the International Air Freight Capacity scheme has contributed to maintaining airfreight capacity at 80 percent of pre-COVID-19 levels, as well as ensuring, in many cases, there are passenger routes to and from New Zealand.

The maritime industry is also under considerable pressure and grappling with significant issues arising from increases in freight rates, border restrictions, including crew changes, intermittent congestion and ship resupply issues – as well as the impact of COVID-19 outbreaks on ships. These issues need to be carefully managed to keep our supply chains open.

Any reduction in economic activity will see revenue and often profitability, fall for transport operators and a loss of tax revenue for land transport. The effects of this reduction will be uneven across places and regions. In addition, New Zealand could see changes in the relative importance of different

industries and this change could affect the type of cargos moved. This uncertainty makes supply chain planning difficult.

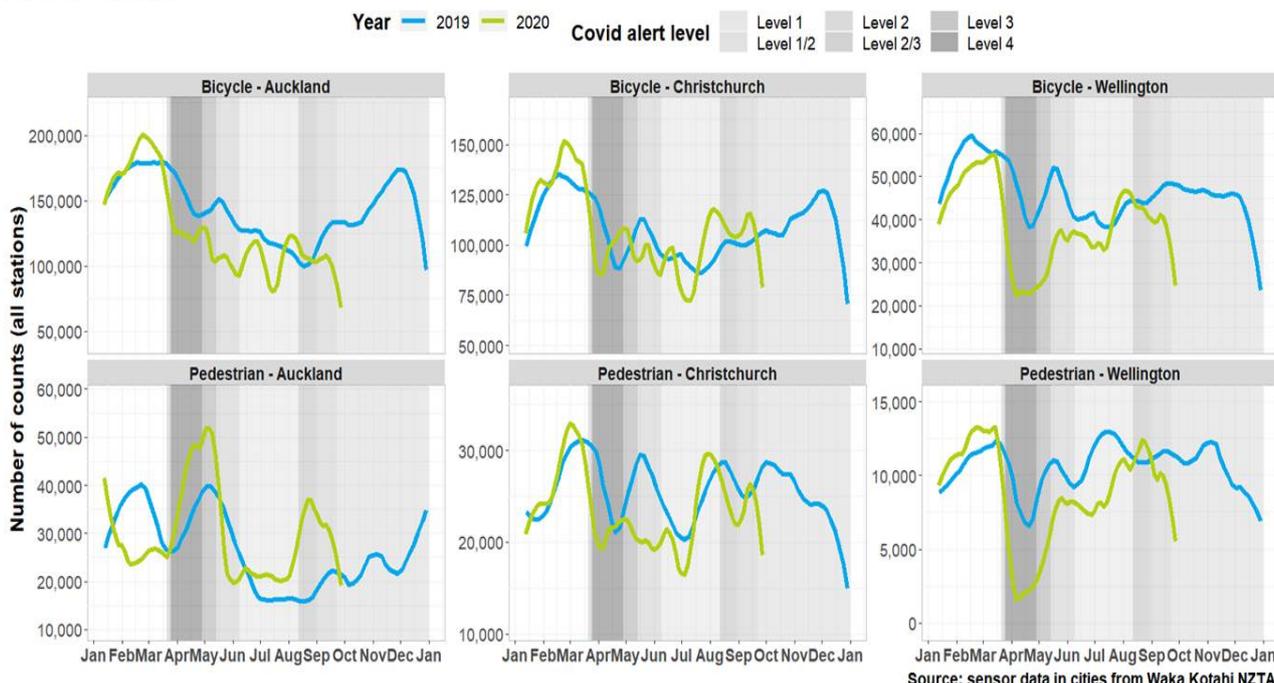
COVID-19 has longer-term policy implications but they are uncertain

The medium to long-term implications of COVID-19 are not yet clear and the level of uncertainty is high, as the recent community outbreak in Auckland demonstrates.

By constraining the ability of central and local government to collect revenue, a domestic recession could result in delays to infrastructure builds across the land, rail, maritime and aviation sectors. A delay could impact on employment and economic benefits these developments would provide. The New Zealand Upgrade Programme and other government spending has addressed some of this potential problem. In other areas, it may take some time for infrastructure building to resume.

A global recession is also likely to reduce demand for other New Zealand exports, affecting GDP and

Weekly total cyclists and pedestrians counted by sensors
Lines are smoothed



Source: sensor data in cities from Waka Kotahi NZTA.

employment, as well as demand for domestic transport. A global recession could also see changes in the international shipping lines and airlines servicing New Zealand as firms consolidate and demand falls.

There have been accelerations in existing travel trends (e.g. working from home, online shopping). However, it is too early to tell how permanent and substantive these changes are, or their impacts on different segments of the economy and society.

Changes in travel patterns could mean urban centres and residential suburbs could look different in the longer term to previous expectations. Land use and transport planning may need to reflect these changes. Government will also need to consider how to invest in future transport infrastructure given future travel patterns are uncertain.

Government investment to stimulate recovery can bring forward, and lock-in, more sustainable transport options, for example, by accelerating mode shifts to public transport.

Some behaviour change, such as working from home, can be beneficial for congestion and the environment, but needs to be balanced against other objectives, such as economic activity within centres, participation in society and getting good value for money.

Economic recession is likely to exacerbate the difficulties some segments of society face accessing transport. Transport costs may become less sustainable for some users.

Interventions to reduce emissions may need to be strengthened, and the challenges associated with reducing emissions may be even starker as a result of COVID-19.

COVID-19 requires a continuing response

The Ministry leads the transport system response to COVID-19 through the Transport Response Team. For this COVID-19, the Transport Response Team is made up of the Ministry, Waka Kotahi, KiwiRail, Maritime NZ and the Civil Aviation Authority. The Ministry's COVID-19 Response Programme provides the overarching framework for on-going work. This ensures that the transport system's response is coordinated, efficient, and effective.

The Ministry and the Transport Response Team have good connections and ways of working within government, and with stakeholders in the transport system. This supports stakeholders to mobilise and respond to the pandemic including local government, public transport, maritime and aviation operators.

On-going Ministry resources are needed to support the COVID-19 work, but these resources need to flex up and down as the situation evolves. This requires the Ministry work programme to be agile, and further thought is needed as to how the Ministry can continue to deliver its response and recovery roles, as well as other priorities across the transport portfolio.

Border settings are a focus

As Transport Minister, you have an essential role in managing New Zealand's international border and maintaining international connections.

The connections provided by the aviation and maritime sectors are an important enabler of New Zealand's economic and social wellbeing. These connections underpin the country's international trade in goods and services and link New Zealanders to the world.

Border restrictions combined with domestic travel restrictions under Alert Levels 4, 3 and 2, had an immediate and significant impact on airlines and the wider aviation sector [e.g. ground support operations, air navigation services and government agencies].

The border restrictions saw international passenger arrivals drop from a typical 20,000 people per day to between zero and 200 people – with consequential impacts on air freight capacity.

Less severe was the impact on international maritime freight links, which account for approximately 98 percent of New Zealand's trade in goods by volume. However, the maritime border restrictions have created challenges for crew changes and seafarer welfare.

The Ministry works with the Ministry of Health as it develops and updates Health Orders for the aviation and maritime border, and supports transport stakeholders to put the orders in place. The Ministry plays a role to make sure the public health response measures are workable and do not unnecessarily impede freight and people movement.

The Ministry is part of a comprehensive cross-government work programme on border settings, and sits on the Borders and Beyond Governance Group. This Group comprises the Chief Executives of the New Zealand Customs Service, Immigration New Zealand, Ministry for Primary Industries, Ministry of Transport, Ministry of Foreign Affairs and Trade, and Ministry of Health. Over this term of government, the Governance Group will be working through how to make the border more coherent, smart and safe, including exploring ways to strengthen how agencies work together.

Cross-government work aims to reopen the borders and reconnect markets as safely and quickly as possible, to mitigate against severe longer-term social and economic consequences. This work is backed by a set of principles, agreed

by Cabinet in June 2020, designed to minimise the risk of COVID-19 being reintroduced to New Zealand or the Pacific when there is an increased flow of people and goods across the border.

Government support underpins New Zealand's strategic air links

Since March 2020, a \$600m Aviation Relief Package has provided financial support to airlines. The support encourages airlines to continue flying [or to return to the New Zealand market when conditions improve] and ensures the flow of high value exports and essential imports. Financial support is paid to:

- airlines for Civil Aviation Authority and Aviation Security Service passenger-based fees and for Airways Corporation air navigation charges
- international air freight carriers for air freight capacity on key routes [through the International Air Freight Capacity scheme administered by the Ministry].

A secondary objective of this support is to keep strategic international airlines and the national carrier flying, and to keep links to essential aviation ports open for both passenger and freight flows. This will support a fast recovery when health conditions allow.

The International Airfreight Capacity Scheme has been extended until 31 March 2021, with a first principles review in February 2021. Relief from aviation charges has been extended to December 2020. About \$6 million per week is being spent.

While the Aviation Relief Package is essential in the short term, putting in place COVID-safe travel is critical, so that international commercial passenger air travel can return to its key roles, and allowing New Zealanders to physically connect with the outside world. Given the distance to New Zealand's main markets – and without the prospect of travel and quarantine restrictions evolving – there is a risk that some airlines could

withdraw from New Zealand, given the financial impact of COVID-19. The latest estimates from the International Civil Aviation Organisation indicate the approximate possible loss of gross airline passenger operating revenues at \$388 – \$400 billion [USD, FY 2020].

Given the reliance on aviation for social and economic outcomes, without good aviation links, New Zealand's position in important trade and tourism markets may be damaged, essential workers and New Zealanders will find it hard to come to New Zealand and recovery will be slower. After the global financial crisis, airlines returned to New Zealand more slowly than elsewhere internationally, which affected recovery.

Managing the flow of people into managed isolation and quarantine

The Ministry has been administering a quota where each airline is allocated a maximum number of passengers it can carry on a fortnightly basis. The capacity of managed isolation and quarantine means arrivals are capped at around 500 people per day.

The Managed Isolation Allocation System administered by the Ministry of Business, Innovation and Employment will replace the airline quota. The allocation system is now available for passengers to book places in managed isolation and quarantine, and will become mandatory on 4 November 2020. The quota will be removed when the Ministry is satisfied that the allocation system is managing the flow of people into managed isolation and quarantine.

Cabinet agreed to high-level parameters for case-by-case exceptions for non-New Zealand citizens, who meet specific criteria, to enter New Zealand. Further changes to New Zealand's immigration settings may be the focus of future work.

Cross-government work is also considering further targeted class exemptions to border entry restrictions, as managed isolation and quarantine capacity allows. The Ministry is working with the transport agencies and sectors to identify the skills needed for the transport sector in the short to medium-term. Accessing the overseas skills market will be essential to ensure capability is available for significant transport projects or tasks, including some important road and rail infrastructure projects, such as the City Rail Link in Auckland and the projects in the New Zealand Upgrade Programme.

As the work on exemptions to border entry restrictions progresses, the Ministry will recommend class exemptions for the transport sector to you as the Responsible Minister.

Opening the border safely

Preparing for COVID-safe travel is a focus across government, and the Ministry has been heavily engaged in the work.

Discussions are well advanced on a Trans-Tasman COVID-Safe Travel Zone [TTSTZ], with talks continuing on final aspects of the arrangement. The TTSTZ would only start when the jointly determined health criteria and border preconditions have been met. Existing border controls and airline procedures will be essential for the management of safe travel and additional measures will provide further protection and confidence to the public.

New Zealand is also committed to quarantine-free travel with New Zealand's realm when it is safe to do so. The realm includes Niue, the Cook Islands and Tokelau. Officials' level text of an Arrangement with the Cook Islands is agreed, and initial steps are underway with Niue.

Several other economies would like to explore more open travel arrangements to New Zealand when it is safe to do so. Future settings could take

several forms - from each country unilaterally allowing restricted entry to the other [as Australia and many other countries have allowed from New Zealand], information sharing and co-operation arrangements, through to safe zone travel arrangements along the lines developed for the realm countries.

Beyond the close partners in New Zealand's immediate region, detailed arrangements like a TTSTZ are unlikely to be feasible. Longer-term, the focus will be on the protections needed to progressively open New Zealand up to safe quarantine-free entry. This will include working with international bodies and learning from other nations.

Transport's role in the recovery

Transport has a role in New Zealand's recovery from COVID-19, and the Ministry is working with other agencies on how this might take shape. As set out in Part B of this briefing, the demands created by COVID-19 and the likely global recession will interact with existing and often pressing priorities in the system.

But COVID-19 has highlighted the crucial roles played by the supply chain, the aviation sector, the maritime sector, and public transport in shaping New Zealand's economy. These three sectors are likely to be heavily influenced by the direction the Government chooses for New Zealand's recovery.

In particular, a focus for this government term will be ensuring there is a clear plan for aviation recovery, designed in close collaboration with the sector.

The Ministry will brief you on transport's role in recovery, and engage with you on how this relates to your other priorities, such as decarbonisation of the transport system, as work across government develops.

Part B: Opportunities and Challenges for the Transport System

Delivery now for results into the long term

Key points

- As the transport system's purchaser of outcomes, you have a strong influence over the system and how it delivers for New Zealanders. There are multiple sources of funding available, including the statutory NLTF and general Crown funding.
- However, you will have hard choices to make in allocating resources to the transport system during your term even though Vote Transport is a record \$8.4 billion this year. Transport contributes broadly across government outcomes, and planning and funding involves difficult and complex public policy choices.
- The Ministry is your purchase advisor and has been lifting capability to assist you with medium and long-term choices. This will help you draw a clearer and more certain link between the Government's longer-term objectives, planning, funding and delivery. This is important in the context of increasing and competing demands for investment, funding pressures and multiple funding sources. The Ministry will engage with you on how you would like to shape the system's investment priorities.
- Waka Kotahi has independence in selecting what projects and activities are funded from the NLTF. Still, it must give effect to the priorities that you choose and set out in the Government Policy Statement on land transport (GPS). GPS 2021 was released in September 2020.

- COVID-19 will add to pressures on system priorities and has highlighted some broader questions about what is funded, who should pay, and how. The Ministry will talk to you about how you would like to take these questions forward.
- Your support will be needed to embed improvements into the system in the way projects and value for money are delivered. A change in complexity and scale of delivery brings new challenges for agencies to build their capability, including how to govern larger and more complex projects effectively.

Meeting current needs and investing for long-term outcomes

As Minister, you decide what types of investment are made and how they are funded. You purchase outcomes for the system. The Ministry is your purchase advisor and it is the only transport agency that is not statutorily independent of you. Your purchase role includes choosing the most important outcomes, which broader government priorities transport will support and how, and the role for investment alongside the other levers. The transport outcomes framework has been established to help you with these choices, as a way of articulating the outcomes you want to purchase and assisting you with choices around trade-offs and interventions.

There are new demands on the land transport planning and funding system

The current transport system, and the way it is planned and funded, was designed for a country

with fewer New Zealanders. Today's challenges include supporting the growth of large cities, investments to reduce emissions and build resilience to extreme events, and the use of economic and planning levers to influence and encourage sustainable growth and urban renewal. The infrastructure required for some of New Zealand's transport problems is becoming more expensive and complicated. Increased demand for investment also reflects a better understanding of transport's role in a broad range of other outcomes.

There is no single 'right' plan or way to meet these challenges. There will be important public policy choices over the priority of these challenges and the investments needed in short and long-term plans to achieve the preferred future for New Zealand.

You have different funding sources available for different priorities

There are multiple sources of funding available for meeting government priorities. These have general principles around their use, and these sources can be combined or used with financing options. These sources include:

- user charges, such as public transport fares
- fuel excise duty (FED), road user charges on light diesel and heavy vehicles (RUC) and other charges that are paid into the NLTF – the NLTF is reserved (hypothecated) for land transport purposes
- central government funding from general sources allocated through the budget process
- local government funding from rates and other revenue, which local government uses to invest in transport infrastructure and services
- financing or borrowing (which can be used to bring projects forward but must be repaid from future funding).

Spotlight on GPS 2021

The strategic priorities for GPS 2021 are:

- safety
- better travel options
- improving freight connections
- climate change.

GPS 2021 invests \$48 billion from the NLTF in services and infrastructure over 10 years (around \$4 billion per year).

Local government co-invests around \$1 billion per year.

Rail, for example, combines several sources of funding to recognise its multiple outcomes and purposes.

Using rail as an example, the funders are:

- road users who pay into NLTF and, in the future, rail track users
- rail users who benefit from using trains
- KiwiRail commercial revenues and financing arrangements
- central government, reflecting that the rail network is a national, intergenerational asset that provides a wide social and economic benefit.

Central government also invests in KiwiRail as a shareholder.

You are responsible for a specific land transport fund

Hypothecated funds like the NLTF are unusual internationally, and central and local government rely on the stability and certainty that it provides.

You can set priorities for the investment from the NLTF through the GPS. You are also the approver of road policing activities and the Rail Network Investment Programme, which are funded from the NLTF.

Waka Kotahi invests the majority of the NLTF on the Government's behalf, and according to your priorities in the GPS. The most recent GPS was released in September of this year [GPS 2021]. Under its legislation, Waka Kotahi has statutory independence. This independence means Waka Kotahi must choose the projects and activities to be funded from the NLTF independently of you, but it must still give effect to the GPS. The projects and activities Waka Kotahi selects will be set out in its next 3-year National Land Transport Programme, which starts in mid 2021.

About 70 percent of NLTF expenditure goes towards the current transport system, including committed capital projects, debt repayments, public transport services (including rail, buses and ferries), and operating and maintaining the road and the rail network. This proportion is rising with inflation, increased wear as traffic volumes grow, the costs of weather events that cause damage or washouts, maintenance of new assets, and increasing service levels.

The remaining thirty percent (about \$1.2 billion per annum) is available to invest in new infrastructure and services, and to service new debt. You can influence available resources and their allocation by:

- setting priorities in the GPS
- adding funding from Crown sources (current Crown-funded investments in transport include \$637 million in Provincial Growth Fund projects and \$6.8 billion over around 10 years from the New Zealand Upgrade Programme)
- increasing FED, RUC and other charges
- seeking contributions from transport users (such as through tolling), or from broader beneficiaries of transport investments
- changing the rules of the funding system that are set in legislation.

The Ministry has developed a monitoring approach for the GPS, including a set of indicators to assess

GPS outcomes and "deep dives" into particular activities. The Ministry will discuss with you how GPS 2018 is being monitored, and how GPS 2021 will be implemented. The Ministry will also start working with you on GPS 2024 next year.

Government is increasingly using funds from outside of the NLTF for transport investment

Government can also achieve its priorities by using general funds to purchase services and projects from Waka Kotahi, KiwiRail or others. Direct Crown purchasing enables you to select particular projects, their features and their timing, or use transport as a lead investment in broader government priorities.

Successive governments have been increasingly using funding from outside the NLTF to invest in transport infrastructure and services. This funding has become very significant, and the previous Government included funding from the Provincial Growth Fund, direct funding through the New Zealand Upgrade Programme and Crown support for the NLTF due to COVID-19.

There are reasons to work outside the NLTF. These reasons include:

- when the Government wishes to invest in projects for broader outcomes (such as the PGF where transport is being used as a lead investment in regional economic development)
- when Ministers want to pick the details and timing of projects
- the scale of investment requires Crown funding.

But these projects can still impose costs on the NLTF (including future maintenance), so officials will provide advice on their broader implications for the land transport system when you consider them.

A new framework will help you connect the short, medium and long term

Your choices will shape the transport system across the short, medium and long-term, balancing increasing and competing demands, and involving funding pressures and multiple funding sources. Work over the past few years has sought to help you make these choices deliberately, with a clear view of how choices today connect to objectives further out. This includes setting medium-term “mezzanine” strategies [10-15 years] that achieve bigger objectives across agencies and levers, such as the road safety strategy, *Road to Zero*, and the *Transport Emissions Action Plan* that is being prepared. Setting priorities will soon be framed by a new 10-50 year framework, the Generational Investment Approach [GIA].

The mezzanine strategies help you to focus on a wider set of objectives for an aspect of the system, and co-ordinate and plan across the transport agencies and levers. Not all of the mezzanine strategies are complete. The Ministry will discuss which of these you would like to prioritise. Work is well advanced on an emissions’ strategy, and has started on a supply chain and freight strategy.

Your priorities drive delivery within a 1-10 year delivery horizon. This includes delegating some planning choices to delivery agencies, particularly Waka Kotahi, and plans, such as the National Land Transport Programme and the draft New Zealand Rail Plan. KiwiRail has planning responsibilities for the national rail network as outlined in the Rail Network Investment Programme that you will approve.

Working with the sector, the Ministry has developed 37 outcome indicators and is strengthening expectations on the transport agencies to use the transport outcomes

framework and the indicators from strategic planning down to project level. This will allow progress to be more accurately tracked, and will provide a check for whether plans are performing as hoped, or need to change.

The Generational Investment Approach is the first transport-wide framework for making long-term choices

The GIA sets out the choices that are available to governments, depending on their objectives, from 10 to 30-50 years out. The approach considers the broader value of initiatives and investments over time – such as bigger changes in investment levels and particular investments in rapid transit, major corridors [like Hamilton to Auckland], and across air, land and maritime. Potential long-term investments will be added to the GIA framework, and analysed through it, for the first time during your term.

The GIA will identify changes and initiatives that are beyond current delivery horizons, evolve as things change, and give you better choices down to the level of potential investment options to pull into the GPS or direct Crown purchasing, mezzanine strategies, or area arrangements and spatial plans. The GIA uses the mature methodology of multi criteria decision analysis and can prioritise short-term investments against the transport outcomes framework.

The GIA is being developed alongside the Infrastructure Commission’s work to develop New Zealand’s first 30-year infrastructure strategy. Officials will talk to you early in your term about this work, and how it can help to advance your priorities for transport.

A longer and more certain pipeline should result

Greater certainty about the infrastructure pipeline is a frequent request made of the transport sector, and infrastructure agencies generally. Success at creating certainty can help New Zealand attract capability to the New Zealand market, reduce delivery risks, and help the market plan more effectively.

Plans must be able to adapt, but better visibility of what is possible can encourage greater consensus and earlier starts on the most important initiatives. Work is proceeding on the GIA so it can align transport's long-term direction and the broader 30 year infrastructure plan.

COVID-19 has highlighted questions around what to fund

Government support from tax revenues as part of the COVID-19 response has raised questions about whether the current scope and parameters of New Zealand's transport funding systems are right for the future.

Questions include, for example, whether transport sources should fund a minimum level of connectivity for communities in regions, or whether to consider more broadly what public transport is funded. These valid questions were already being raised before the pandemic. The Ministry will engage with you on the extent to which you want to consider these issues.

Good governance is critical for successful delivery

The transport system is delivering significantly more investment than a few years ago. The size and complexity of transport investments may continue to increase, depending on your priorities and New Zealand's post-COVID-19 response. One

of the most important lessons from the delivery of large scale infrastructure internationally is that governance matters. Good projects do it very well, and poor governance is often cited as the most significant, yet avoidable cause of failure.

Waka Kotahi must ensure there is value for money for projects and activities funded from the NLTF. With delivery governance largely internalised within Waka Kotahi, GPS and agency monitoring needs to be carried out well to create the necessary tensions in the system.

Outside of the NLTF framework, strong governance frameworks will be necessary for the delivery of the Government's rail programme, direct Crown investments, such as the New Zealand Upgrade Programme, and new complex projects like rapid transit.

Good governance relies on having the right building blocks in the system. These include clear roles and aligned incentives, the right commercial tensions, and an open and accountable culture. While there are promising signs of increased collaboration throughout the sector, bigger and more complex projects will require a step up from every agency. Your leadership to embed good governance practices in the system will be important because, as the system's ultimate purchaser, you will rely on this being done well.

Delivering on the Future of Rail Review and rail system changes

The Future of Rail Review defined the role and purpose of rail within the transport system. The first phases of implementing a new planning and funding framework for the rail network are underway, as part of the next National Land Transport Programme process.

KiwiRail is managing a multi-billion dollar programme of investment over 10 years. Delivering this programme, while implementing new planning

and funding changes for rail, is a significant challenge for KiwiRail and other rail participants.

The Ministry is working alongside the main rail system participants to support implementation, in particular KiwiRail, the Treasury, Waka Kotahi, Auckland Transport, Auckland Council and Greater Wellington Regional Council. KiwiRail has to move quickly to put in place capabilities, systems and practices to support a larger programme of delivery than it has had for decades.

You will need to work with KiwiRail's shareholding Ministers to support the delivery of these significant rail system changes.

You should expect greater value from greater spend

This year's \$8.4 billion in Vote Transport is up from \$3.6 billion in 2016/17. This is a significant spend

during a period of recession, in a capacity constrained market, and delivery agencies will likely advise available funding may not be enough. There are real funding pressures in the system, including the task of balancing maintenance against new projects, and increasing community demands for services and infrastructure.

In this context, it is important to have certainty about the value that is being achieved, and officials are considering how value for money is judged. This is about how to measure and monitor, as well as whether the right commercial tensions are embedded and working in the system. Officials will engage with you on this early in your term.

Changing how transport is paid for

Key Points

- There are well established tools for collecting revenue for New Zealand’s transport system. Some of these tools are world leading but there are developing inequities and inconsistencies between road users, the costs and pricing of externalities, and the long-term sustainability of FED.
- There are also challenges for how New Zealand pays for large-scale intergenerational projects, primarily where they might deliver benefits wider than purely transport benefits, such as urban renewal. You will receive advice shortly on the funding options for these projects.
- There is a once-in-a-generation opportunity to put in place a revenue system to pay for the current and future transport system New Zealand wants.
- This will take time to get right, and there may be challenges in replicating some of the features of the current system that are relied on most. A future transport revenue system will look different from today’s system.
- Central and local government both need to consider how, and how much, they respectively pay but both have generally made conservative choices over revenue tools to date.
- COVID-19 is challenging existing funding methods for transport regulatory agencies. The Ministry will provide early advice on the issues these agencies face.
- You will be able to steer the course of work on the revenue system.

Funding and financing a bigger system

Government can pay for transport projects through Crown funding or, in the land transport system, it can also allow Waka Kotahi to leverage the NLTF.

Related borrowing and debt instruments are usually arranged through the Treasury. Private borrowing has higher interest costs than Crown borrowing, and the value obtained from it needs to be considered carefully.

The framework is flexible but the NLTF’s ability to repay debt is limited

The size of the NLTF and its fixed revenue base means it struggles to fund larger, intergenerational projects. FED and RUC stay the same unless government decides to change them. Unlike some other infrastructure, transport assets do not usually generate revenue once built.

The NLTF currently manages \$1 billion of debt, as well as \$1.6 billion owing in Public Private Partnerships (PPPs) liabilities, and \$0.7 billion in interest rate swap liabilities (related to the PPPs). Waka Kotahi also has \$100 million remaining of a borrowing facility provided to respond to lower revenue. The Let’s Get Wellington Moving indicative package endorsed by the previous Government assumes that a long-term loan of up to \$2.2 billion will be taken out to deliver rapid transit in Wellington.

Government has options to expand what can be financed. It can influence NLTF debt levels by opening up new revenue sources, and change delegated permissions that limit Waka Kotahi’s ability to raise debt. Government can agree to Waka Kotahi leveraging the NLTF over longer terms for agreed priorities, as it does with PPPs. In doing so, government would need to consider how leveraging might affect future choices and intergenerational equity issues because it will create long-term funding commitments for the NLTF.

The Ministry of Transport (as the NLTF and revenue system steward) and the Treasury (as Crown guarantor and government's overall fiscal manager) will provide advice to you, both on direct NLTF implications and wider policy issues for the Crown.

Dealing with intergenerational projects differently

As government moves to deliver assets with a longer lifespan, officials are exploring suitable government capital management arrangements. Longer-term, multi-year funding arrangements may be a better approach for these assets.

In principle, large and long-lived transport investments that cater to the needs of current and future generations should be paid for by those who benefit over their lives. This may require borrowing, revenue sources that fairly identify and recover costs from beneficiaries, and acknowledging that these investments have wider flow-on effects for the economy. Work is well advanced on funding and financing arrangements for the first of these new, intergenerational projects. You will receive this advice in November.

Work is underway on whether the revenue system should be replaced

There are established tools for collecting revenue for New Zealand's land transport system. Some of those tools, like the distance and weight based RUC system for diesel and heavy vehicles, are still world leading [e.g. the RUC system will allow electric vehicles to be charged for road use as they come into the fleet in greater numbers]. FED is an extremely cost-effective and efficient method for collecting revenue from petrol vehicles.

However, there are developing issues around inequities and inconsistencies between road users, the charging of externalities and the long-term sustainability of FED (as vehicles become more

Spotlight on land transport revenue

In 2018/19 and before COVID-19, NLTF revenue was made up of:

- FED - around \$2 billion per year
- RUC - around \$1.7 billion per year
- Licensing fees etc - around \$0.2 billion.

Revenue for the NLTF will increase from around \$4.4 billion in 2021/22 to \$5.1 billion in 2030/31.

No FED or RUC increases are forecast in the first 3 years of GPS 2021.

efficient or there is widespread mode shift from private cars). There are increasing questions about what is paid for and how it should be paid.

Overall, land transport revenue from the existing sources of FED and RUC is not declining and will not for the foreseeable future, even with electric vehicles (EVs) and COVID-19 impacts. EVs and those vehicles using other new fuels, such as hydrogen, can already be charged through RUC for their road use while other countries are grappling with how to charge them. Light EVs are exempt from the charge until 1 January 2022 to encourage their uptake, unless government wishes to amend regulations to extend the exemption.

While revenue is not declining, the current revenue base will not be enough to meet expectations for new infrastructure. The current revenue system will face challenges in the longer term, with emergent challenges from:

- expectations that the revenue system pay for an increasingly broad range of services and infrastructure
- local government's ability to fund its contribution to land transport projects.

A revenue system that better reflects the transport system

A replacement revenue system is not needed in the short term, but work to replace it will take some time. It is a complex project, which will require engagement with the public and agreement on its principles, and implementation would likely be challenging.

It will be hard to replicate the elements of the current revenue system that are relied on most. The existing system provides a very stable source of revenue, is relatively resilient to economic shocks, has low collection costs and is hard for payers to game or avoid. The current system has enjoyed broad support, given the straightforward connection between how revenue is collected and what it funds. However, some parts of the sector have become concerned as more of the NLTF has been spent on activities other than road, such as rail, even though it is a small percentage of overall NLTF spending.

On the other hand, there are important questions for any work on the revenue system to consider. These questions include:

- what government would like the revenue system to fund
- how charging can be used to change people's behaviour to reduce congestion or pollution and emissions
- how much more of transport externalities should be passed directly on to the users (e.g. pollution, emissions)
- how central and local government, road users, rail users, and others pay their share, including making sure that the people who benefit from infrastructure pay towards it
- what role technology should play in any future road charging and its implications for privacy
- how to make any new system fair for all New Zealanders, especially those who have lower

incomes or are disadvantaged in some other way.

Therefore, a replacement revenue system could look different to what New Zealand has now, in terms of what is priced, how revenue is collected, and even where the boundary sits between a core revenue system and complementary funding and financing tools.

You will steer this work as Minister, especially establishing what you want to achieve from any new system. This programme of work will be large and will take time. Work completed already by officials on distance-based charging for all road vehicles has highlighted that there are opportunities, as well as policy and implementation challenges.

A scheme will need to be developed and implemented carefully. There is considerable inertia in the system given the large numbers of people and vehicles covered by it, and the challenges of gaining public acceptance for a new charging system. The consequences of choosing the wrong solution, or implementing a good solution poorly, would be significant.

Funding methods for the transport regulatory agencies need to be reviewed in light of COVID-19

Most of the funding for the Civil Aviation Authority, Maritime NZ and Waka Kotahi is through third party levies, fees and charges. Airways funds its air traffic services from commercial charges. COVID-19 has had a major impact on the revenue of these transport agencies and SOEs.

Sharp drops in passenger revenue (particularly due to border restrictions) are proving challenging for the Civil Aviation Authority and Maritime NZ to manage. Alongside border agencies, there is work on how to retain sufficient capability and capacity for recovery, while delivering efficiencies and using re-deployment opportunities for staff.

Work is required on how the aviation sector's regulatory system should be funded, especially given recovery will take some time. The Ministry will provide you with early advice on the funding and financing of the transport agencies.

Local government is seeking support from central government to consider additional revenue sources

The transport revenue system relies on local government meeting a share of the costs of transport commitments. However, councils already face funding constraints and COVID-19 has worsened these. The pressures on councils include replacing water infrastructure and bringing assets up to building standard, and co-funding local transport projects including air and maritime infrastructure like airports and ports, while also facing pressure to limit rates increases.

As a result of this pressure and growing populations, local government wants new sources of revenue for land transport. Government has introduced new tools, such as potential infrastructure levies through the Infrastructure Funding and Financing Act 2020. The Act enables councils to establish special purpose vehicles to build and raise finance for new infrastructure, repaying any loans by a multi-year levy on the people who benefit.

Another potential tool is regional fuel taxes. Regional fuel taxes in regions other than Auckland are prohibited until 1 January 2021. Some councils may approach you after this date wanting a regional fuel tax in their areas.

Government agencies continue to work with local government on funding options, but with a preference for improving existing tools rather than creating new ones. As part of putting GPS 2021 in place, officials are starting to work on a funding toolkit that will help local government explore a

wider set of funding options and share good practice. The Ministry will initially lead this work but other agencies, such as the Department of Internal Affairs and the Treasury, will play a greater role over time.

There has also been some interest from the large metro councils for using demand management tools, such as congestion charging, as a source of revenue. However, its use as a tool to collect revenue has limitations, especially as the primary aim of congestion charging is to reduce traffic.

More liveable cities

Key points

- New Zealand's cities need more housing, to reduce carbon emissions, and improve access for people and freight while making places more liveable. The decisions you make can make a positive difference in all of these areas.
- Public transport, walking, and cycling improvements need to be prioritised to support higher-density developments and more housing. These transport modes can deliver significant health and economic benefits, ease congestion, and reduce emissions.
- You will face difficult choices about how major urban transport projects could be funded and delivered, and how to prioritise initiatives across regions. There is limited funding in the NLTF to fund major urban transport packages in every region. Local government will also expect central government to co-fund major urban transport projects, including rapid transit systems.
- You will need to be closely involved in cross-portfolio work on the reform of the Resource Management Act. This reform has major implications for the planning, funding and delivery of transport infrastructure and services and the work required could limit capacity to manage other major system changes.
- You are the lead Minister for formal arrangements with local government on transport priorities in their areas. You jointly lead the Auckland Transport Alignment Project [ATAP] with the Mayor of Auckland, Hon Phil Goff. Early in the term, you will receive advice on the ATAP 2021-2031 investment package.

New Zealand's most pressing transport challenges and opportunities are in cities, where most people live

Approximately 87 percent of New Zealand's population lives in urban areas, with over half the population living in Auckland, Hamilton, Tauranga, Wellington, and Christchurch.

Over the last decade, the pace and scale of urban growth has often exceeded central and local government's abilities to plan effectively for this growth and fund the services and infrastructure needed to support it. In New Zealand's fastest growing cities, housing supply shortages have exacerbated housing affordability problems. Population growth, economic activity, and urban expansion have also driven rising private car use. New Zealand's vehicle fleet has grown by over 60 percent since 2000, and New Zealand is among the top ten countries for vehicle ownership per capita. More car use has generated more congestion and pollution, and often made New Zealand's cities less attractive and healthy places to live, work, and play in.

Pressures to build more housing in appropriate areas with transport infrastructure and services to support this, coupled with pressures to reduce carbon emissions and other pollutants, have converged to create major challenges for transport in cities.

The transport system plays a pivotal role in enabling and shaping urban development

Recent government policy initiatives, such as the Urban Growth Agenda, have aimed to address urban growth pressures. These initiatives aim to

create well-functioning cities and encourage urban growth up (though intensification) as well as out (through expansion).

To date, urban growth in New Zealand has primarily occurred through expansion. Planning constraints have made it easier to build on the edges of urban centres, where land is cheaper, instead of intensifying. Investments in urban state highways have also enabled this expansion. New greenfield developments have often failed to provide people with viable transport alternatives (other than using a car), which has resulted in people facing high transport costs to access jobs and other opportunities.

Compared to the past, urban intensification now has more weight as a strategy for successful and sustainable growth. For example, the National Policy Statement on Urban Development (NPS-UD), *gazetted* in July 2020, requires local authorities facing the most growth pressures (Auckland, Hamilton, Tauranga, Wellington, and Christchurch) to remove obstacles to higher-density housing and commercial developments in specific areas. These areas include city centres, places within walking distance of rapid transit stops, and other areas where people can access many opportunities and amenities (e.g. shops, workplaces, schools, health services) by walking, cycling, or using public transport.

In partnership with central government and mana whenua, councils are developing long-term spatial plans that prioritise urban intensification, plus expansion in appropriate areas. A common theme in all these plans is the development of rapid transit corridors, and frequent public transport services, to provide the backbone for urban development. This approach is crucial to enable growing populations to move efficiently through urban areas without more congestion. Improved walking and cycling networks also feature heavily, so that people can easily access public transport services and places nearby. This means that the

successful delivery of many of the Government's other priorities in relation to housing, urban development and the environment are closely linked to transport in cities.

The planning system is now better positioned to deliver urban intensification. Major transport improvements will be important, especially public transport networks (including rapid transit) and high-quality options for walking and cycling.

While many cities and regions could benefit from transport improvements, you will face difficult decisions about how to prioritise and fund them

New Zealand's cities, towns, and regions have different needs, and could all benefit from transport improvements to varying degrees. Fast-growing cities require substantial transport investments to shape future urban development, enable sustainable growth, and to improve productivity. Regions can require investments beyond their population share, to maintain and strengthen transport networks that support exports and New Zealand's international competitiveness.

Central and local government need to be aligned on the purpose of large transport investments, including how these investments support housing and urban development, as well as where and when to invest, and how costs are shared. Urban Growth Partnerships between central and local government, as well as mana whenua, provide a useful framework to align interests. However, these partnerships will be tested when it comes to funding major transport projects, such as rapid transit systems. While councils are focused on local and regional priorities, central government also needs to consider options across New Zealand and identify national priorities.

There is limited funding available within the NLTF to fund major urban transport packages in every region. Many councils also face funding constraints, which have become starker as a result of COVID-19. The NLTF was not intended to meet these types of constraints, and packages like Let's Get Wellington Moving have positioned it as a fund that can meet a 'transport share' of broader packages that achieve a range of outcomes.

The GIA will assist you to prioritise urban transport projects that the current funding system may not easily deliver. The GIA will help identify strategic projects far enough ahead of time to open up options for funding and financing, managing delivery risks, and finding the capability that is needed from the market.

Spotlight on Auckland

The opportunities and challenges for urban transport are accentuated in Auckland, where around one third of New Zealand's population lives. Scale, diversity and growth form the backdrop to transport policy, with Auckland projected to account for about 60 percent of New Zealand's population growth through to 2043.

Auckland faces increased congestion, reduced accessibility, increased deaths and serious injuries on the road network, and increasing negative impacts of transport on the environment. These all impact on the city's productivity and quality of life.

Over recent years, Government and Auckland Council have taken a joint approach to address these challenges through ATAP. This well established partnership involves a shared strategic approach and joint development of investment packages. Government is a significant investor in Auckland's transport system. Working alongside Auckland Council helps to optimise investment decisions.

The policy approach in Auckland aims to incentivise better transport options, with a move away from single-occupant vehicles as the dominant mode of travel, and more significant roles for public transport, walking, and cycling. Building Auckland's rapid transit network (trains, dedicated busways, and light rail) is integral to Auckland's future, to allow mass movements of people through uncongested corridors. Rapid transit, by encouraging greater urban intensification, also helps to address Auckland's housing supply and affordability issues. Policy work is also considering new tools such as congestion pricing to help manage the demand on the transport network.

Investing in better public transport is having a significant impact, with train and bus patronage up significantly over recent years. The number of people who travel into the city centre by public transport is now equivalent to the number travelling by car. Between 2003 and 2019, public transport patronage in Auckland increased by 83 percent – almost three times the rate of population growth.

The COVID-19 shock has created uncertainty around transport demand in Auckland, including whether thousands of city centre office workers will choose to work remotely on a more permanent basis.

Current ATAP modelling is undertaking sensitivity testing around working at home and implications for transport demand.

Government will need to continue to play an important role in Auckland. Major transport issues include the successful delivery of the \$4.4 billion City Rail Link project by the Crown and Auckland Council owned City Rail Link Ltd, light rail, a revised ATAP investment package, congestion pricing, key New Zealand Upgrade projects, the role of the port in the national freight system, resilience and network vulnerability issues, and recovery from COVID-19.

The transport sector needs to improve its capability and capacity to deliver rapid transit systems

There is a growing need for rapid transit systems in New Zealand's major cities. This will require working out long-term funding arrangements, principles around central and local government's funding contributions, and the use of funding tools that ensure some contribution from those that benefit from the investment.

Existing legislative and regulatory frameworks were also not designed with these types of projects in mind. Rail regulation, utilities management, and land acquisition will need to be made appropriate for rapid transit delivery. This work is significant and will create a generic framework that can be applied to the delivery of these kinds of projects.

Large rapid transit systems are among the most complex and demanding infrastructure projects to deliver, and New Zealand's transport sector has limited experience in these. Although there are successful examples [e.g. the Northern Busway in Auckland], central and local government need to scale up their abilities to plan and deliver major projects. New Zealand will also need to maximise the urban development opportunities around rapid transit corridors and stops.

Planning and delivering rapid transit requires multiple agencies within central and local government to work closely together, including the Ministry of Transport, Waka Kotahi, KiwiRail, councils, and other local entities. To improve co-ordination between agencies, we are proposing to develop a National Rapid Transit Strategic Framework with Waka Kotahi and KiwiRail. You will receive a briefing on this by the end of the year.

To fund major urban transport projects that deliver long-term outcomes, both central and local government will need to consider a variety of funding sources and financing approaches, which may involve innovative arrangements and new tools. There will be policy issues of national

importance, such as considering intergenerational equity impacts.

Officials have begun work on an initial set of priorities. Advice will be provided shortly on the City Centre to Mangere project. This will set out options for delivering and funding the most significant inter-generational transport projects in cities.

Work on a potential rail service between Hamilton and Auckland will also help the Government and others to understand the value of large transit developments to their local area, their region, the national transport network and the economy.

There are other opportunities to make changes to transform cities and improve well-being

In addition to building on recent policies and partnerships, there are other areas where you could support strategic interventions over the next three years to significantly improve the liveability and productivity of New Zealand's cities. These include:

- improving spatial planning through resource management reforms
- improving public transport services, such as trains, buses and ferries
- congestion charging opportunities
- unlocking the potential of cycling and micro-mobility.

The resource management system needs to give greater weight to spatial planning

In its July 2020 report, the Resource Management Review Panel identified the need for land use and infrastructure (including transport infrastructure) to be much more strongly aligned through strategic and integrated planning [i.e. spatial planning]. There is also the need to better enable development within environmental limits.

There is no consistent framework for spatial planning in New Zealand. Some councils are making progress in developing spatial plans, but without a national legislative framework.

The reforms to the resource management system, if the Government proceeds with them, offer a major opportunity to strengthen spatial planning and deliver better transport outcomes. From a transport perspective, there is a need to ensure that the RMA reforms consider central government imperatives, such as the delivery of integrated rail and state highway networks, national delivery of road safety programmes, and the need to recognise the scale, complexity and long term nature of transport infrastructure projects. These reforms could have significant implications for the GPS and NLTF planning and investment frameworks, which will need to be addressed.

You will need to be closely involved in cross-portfolio work on these reforms. The Ministry of Transport and Waka Kotahi will need to allocate significant resources over the next three years to support these reforms and give a transport viewpoint. This scale of this work will limit the capacity to undertake other major system changes.

More needs to be done to improve public transport services

Public transport usage has grown over the last ten years, with rapid growth in Auckland, in particular, following investments in new infrastructure and services. Councils in various regions have been planning to increase service capacities and frequencies, including through new infrastructure and additional vehicles. As noted above, councils are also aligning future urban development with proposed rapid transit networks and frequent public transport services that would require substantial investments.

Coupled with the funding constraints facing local government due to COVID-19, public transport

patronage and farebox revenue has been severely impacted. Patronage has recovered again in some areas, for example Wellington, after the nation-wide lockdown. However, patronage has been slower to recover in other areas, for example the Northern Busway in Auckland. Central and local government effort over the last few months has focussed on maintaining existing service levels and support mechanisms to allow patronage to recover.

There are additional challenges and opportunities for public transport, which you will need to consider during your term:

- Driver shortages before the COVID-19 pandemic, and industrial relations disputes, driven in part by relatively low wages and poor working conditions, resulted in a high number of service cancellations. Recruitment of bus drivers has recently increased.
- Stakeholder concerns about the affordability of public transport services for users, and access to services in socially deprived areas. Research indicates that fares in Auckland and Wellington are high compared to international cities.
- Councils in New Zealand's largest centres are committed to de-carbonising their bus fleets, to reduce emissions and improve public health.
- General cost escalation is putting pressure on funding.

The Ministry has begun reviewing the framework for the delivery of public transport services, the Public Transport Operating Model (PTOM). The review aims to ensure PTOM is delivering the best outcomes for the transport system. A review of the Total Mobility scheme that supports disabled people will also need to be progressed this government term.

Congestion charging could help to make better use of existing resources, and support transport mode shifts

Congestion charging can ease congestion by charging road users at different times and/or locations to encourage some of them to change the time, route or way in which they travel. Congestion charging could play an important role in New Zealand's largest cities.

International cities of scale are increasingly using demand management tools, including pricing, as part of a tool-kit approach to help change behaviour and encourage mode shift, reduce congestion and emissions, and to reduce the need for new infrastructure.

The evidence from overseas jurisdictions stresses the importance of a strong social mandate for introducing congestion charging schemes. If the Government decides to take this proposal further, there will be a lot of public interest and debate about the merits and impacts of these schemes. It will be important to address people's concerns about fairness, and clearly outlines the benefits of easing congestion to make cities more productive and liveable.

New Zealand has not yet employed the full array of demand-management tools, but as cities grow and the pressures on the transport systems become more complex, these tools can play a role in achieving your objectives. It will be difficult or expensive to achieve some objectives without them.

The ATAP partners in Auckland have completed a technical case for introducing a congestion charging scheme in Auckland that includes mitigating social equity impacts and further public transport improvements. Wellington councils are also interested in congestion charging. The Ministry expects to advise you on the next steps of

the Congestion Question project in Auckland before the end of the year.

Spotlight on active travel

New Zealand has the third highest adult obesity rate in the OECD, partly due to lack of physical activity, and obesity rates are rising.

On average, New Zealanders spend less than an hour walking per person, per week.

A third of all transport trips in New Zealand are less than two kilometres — a distance which is easy for most people to walk, scoot, or cycle.

An estimated 40,000 e-bikes were imported into New Zealand in 2019, up from 15,000 in 2017.

Cycling and micro-mobility modes have more potential

The transport system needs to support urban intensification by making cities easier and safer to walk and bike in. More active travel would also deliver health benefits, help to reduce carbon emissions, improve the resilience of urban transport systems (including to pandemics), and provide positive returns on investments.

Evidence consistently shows that there is significant latent demand for cycling in cities. Many people are interested in travelling by bike, including for everyday trips like getting to school, work, or shops. Recent surges in new forms of micro-mobility, including e-bikes and e-scooters, have amplified this demand.

Successive governments have increased funding for walking and cycling over the last decade. However, most cities are making slow progress in

making streets safer and more attractive for cycling and scootering. Some flagship cycling projects and routes are making progress, but well-connected cycle networks will encourage more people to bike.

The United Kingdom Government recognises the potential of cycling to transform cities by treating cycling as “a new form of mass transit”. There are a wide range of interventions that could unlock the potential of cycling and micro-mobility in cities.

The GPS is the primary way for you to influence the allocation of funding for cycling and other active modes. However, funding set aside for active modes in recent years has often not been taken up, which highlights a need for additional measures to deliver cycling infrastructure improvements.

Reducing transport emissions

Key points

- Transport emissions are going up, while other sources of emissions have plateaued. Transport is a key sector to start making significant reductions in emissions if New Zealand is to meet climate change targets.
- New Zealand is reaching the point where harder measures will be needed for transport to start making a meaningful contribution to emissions reduction over the next three years.
- To date, policies to reduce transport emissions have focused on vehicle and freight emissions, which will be critical to achieving emissions reductions, but we also need to take a strategic and system-wide approach to reduce emissions. This would involve reducing the need to travel by vehicles and trip lengths, increasing the share of low carbon modes and fuels; and improving the efficiency of transport modes and fuels.
- We will seek your views on options for moving quickly with a package of measures to reduce the emissions of light vehicles. The package would include emissions standards and incentives for purchasing low emission cars. The light vehicle fleet makes a large contribution to overall transport emissions.
- We will also seek your views on a draft Transport Emissions Action Plan and on the related decisions that need to be made. Legislation requires the first Emissions Reduction Plan for 2022 to 2026 to be released this term. This plan sets out the strategies and policies for achieving the 2050 reduction targets. The Transport Emissions Action Plan will form the basis of the transport chapter of the Emissions Reduction Plan.

New Zealand is running short of time to meet its commitments to reduce CO₂

Globally, reducing carbon dioxide (CO₂) emissions to net-zero is the highest priority in the fight against climate change. Unlike other gases, CO₂ stays in the atmosphere for hundreds of years.

Greenhouse gas emissions from transport are nearly all CO₂, and transport is responsible for 47 percent of New Zealand's total domestic CO₂ emissions. This substantial share means that, without largely decarbonising transport, New Zealand cannot achieve its statutory target of net zero by 2050. New Zealand will also find it difficult to meet its obligations under the Paris Agreement on Climate Change to reduce emissions to 30 percent below 2005 levels for the period 2021–2030.

Transport CO₂ emissions are increasing

In recent years, emissions from the other major emitting sectors have largely plateaued. Transport emissions are still increasing. Since 1990, transport emissions have increased by 90 percent and within transport, road emissions have more than doubled. This growth compares with an increase of 17 percent in agriculture, the largest emitting sector.

Road transport would need to be the major contributor to lowering overall transport emissions because it currently accounts for 91 percent of transport emissions. Domestic aviation is the next highest source, producing 6 percent of transport emissions. Coastal shipping accounts for 2 percent and rail 1 percent. The Ministry's base case projection forecasts road transport emissions to

keep rising until around 2024, with an increase in vehicle kilometres travelled due to population and economic growth expected before COVID-19. Emissions would then plateau before slowly declining closer to 2030. The projected decline largely reflects an assumed increasing rate of EV uptake as EVs achieve price parity with conventional vehicles.

The Ministry is updating this projection as it is now considered to be too optimistic. This means that transport emissions are likely to rise beyond 2024. This reflects a slower projected uptake of EVs and other lower emission vehicles.

Because of COVID-19, actual emissions for 2020 could be at least 8–10 percent lower than the projection. Beyond 2020, economic recession could cause another fall in emissions. Alternatively, emissions could stay high due to a delay in the uptake of EVs and other low emission vehicles. This could happen if vehicle supply reduces, and households and businesses hold onto their existing vehicles for longer.

While COVID-19 impacts are still uncertain, projected emissions will not decline fast enough for transport to contribute meaningfully to New Zealand's Paris Agreement obligations. For a meaningful contribution, road transport emissions would have to be lower than they were in 2005 in each year of the period 2021–2030. Even in the best of those years, 2030, road transport emissions are expected to be around 20 percent higher than in 2005.

There is little time to take action before harder measures will be required

On 31 December 2020, there will be 120 months left to take action so transport actions form part of New Zealand's first set of post-2020 climate actions required under the Paris Agreement [known as New Zealand's Nationally Determined

Contribution]. If New Zealand does not give priority to lowering transport emissions, there is a risk that investments in vehicles, infrastructure, alternative fuels, freight logistics and supply-chains will lock-in higher emissions for the long term. For instance:

- Vehicles entering the fleet today will be driven until they are 20 years old on average. This means that, if New Zealand is to achieve a low or zero emissions fleet by 2050, nearly all the vehicles entering the fleet need to be low or zero emissions by 2030.
- New Zealand risks being exported vehicles that other countries have banned. Many states (including right-hand drive suppliers the UK and Japan) are considering or have set dates after which petrol and diesel car sales will no longer be allowed, starting from as early as 2025.
- The way urban areas grow and develop is an important factor in the way people travel.

Development without reference to the emissions impact can increase the number and length of trips. Such developments can reduce the ability and ease to use public transport, walking and cycling.

Current policies are not enough for transport to play its part

Current policies are not enough given the size of the shift required in a closing window of time. The main policies already in place are:

- The Emissions Trading Scheme.
- The EVs Programme. This includes the exemption from RUC for electric vehicles, an information campaign and the Low Emissions Vehicles Contestable Fund. The Fund provides up to \$7 million annually to encourage the uptake of low emission vehicles.
- Investment in public transport, walking, cycling and rail freight that has a secondary benefit of reducing emissions.

More recently policy work has focused on reducing vehicle and freight emissions. Reducing emissions from light vehicles is a high priority because they generate 67 percent of transport emissions. The second priority is road freight which accounts for 22 percent. Over the term of the last Government, the Ministry developed a policy package called the Clean Car Reforms. This package did not advance. These reforms would encourage the move to a low emissions vehicle fleet. The package includes a CO₂ emissions standard for vehicles coming into the fleet, and a vehicle purchase feebate scheme to lift demand by lowering the cost of low emission vehicles. We will also provide advice on other complementary measures we believe are needed to support the package.

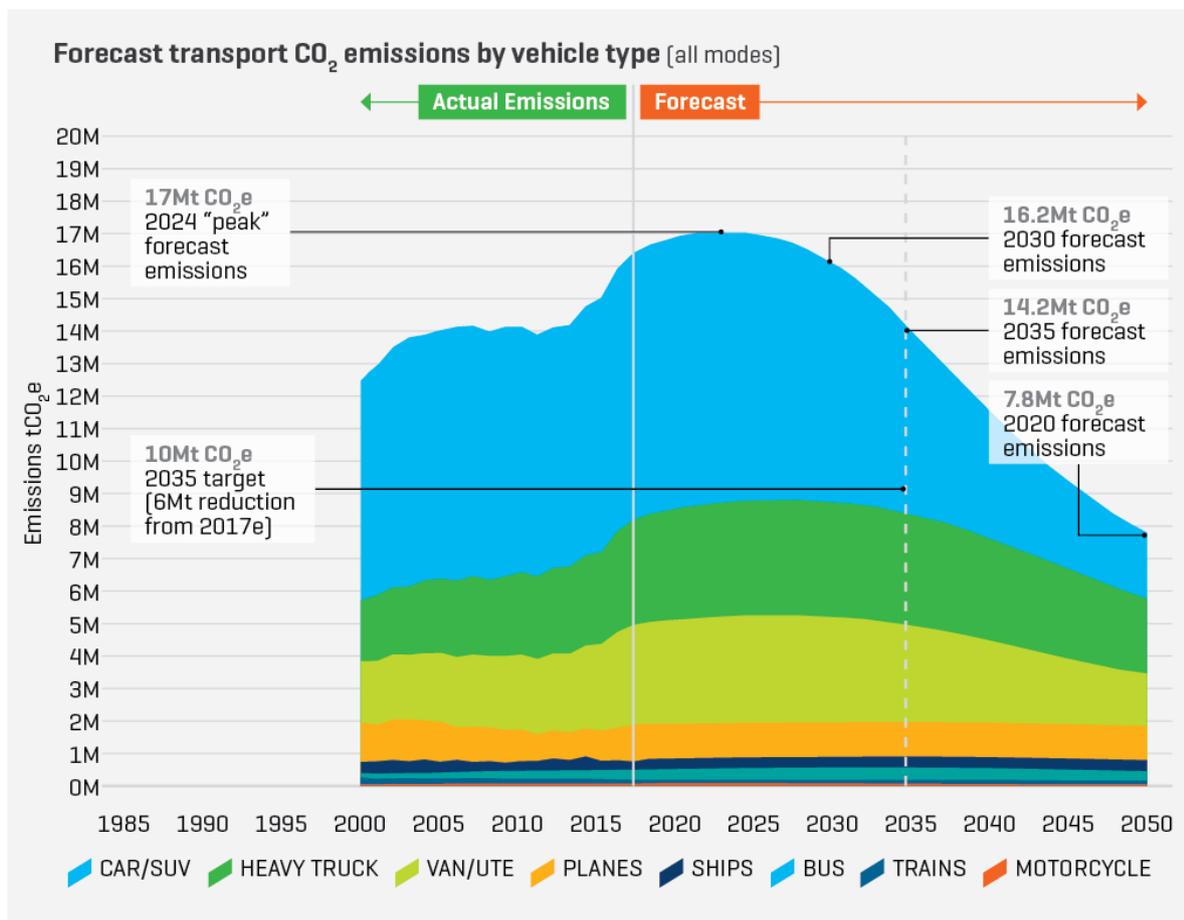
The Ministry also released a Green Freight strategic working paper. This paper looked at the role biofuels, electricity and hydrogen could play in

reducing emissions from road freight. Following discussions with Ministers, the Ministry is investigating the case for having a mandate to encourage the uptake of biodiesel.

Collectively, these policies would stem some growth in transport emissions. However, stopping the growth, and starting decarbonisation, is likely to depend on placing a higher priority on investment, policies and innovation that allow New Zealanders to make sustainable transport choices.

There are still opportunities to achieve substantial reductions in transport emissions

New Zealand can make faster progress if the Government can take a whole of system approach to reducing transport emissions. Opportunities to



reduce transport emissions cluster around three broad actions:

- Avoid – improve the efficiency of the transport system and reduce the distances and need to travel, for example, through better integration of transport and urban development/land-use planning, efficient freight logistics, greater use of teleworking and teleconferencing, and road charging
- Shift – shift to low carbon modes, for example, walking, cycling, public transport, coastal shipping and rail freight
- Improve – lower the emissions of transport vehicles and fuels, for example, through increasing the supply of EVs and demand for them and other low emission vehicles, fuel efficient conventional vehicles, biofuels and hydrogen and investing in the necessary infrastructure to support them, and other new technologies and innovations.

Quickly transforming transport to be low emissions over a limited period of time will have social impacts that need to be addressed. For instance, an increase in the cost of fuel or vehicles can exacerbate transport disadvantage and disproportionately impact people on low incomes. Policy development will need to take these impacts into account.

COVID-19 will present an additional challenge to put in place meaningful change. A recession may mean people hold on to their cars for longer and have less ability to manage new costs. Businesses may not have the same ability to invest in new fleets, technologies, low emission fuels and other innovations. Low fossil fuel prices may also discourage the uptake of low emission vehicles and fuels.

A draft Transport Emissions Action Plan will be available in early 2021

The Ministry is finalising a Transport Emissions Action Plan, which will set out the proposed steps for reducing transport emissions. This Action Plan

will form the basis of the transport chapter of the first Emissions Reduction Plan. The Emissions Reduction Plan, along with an emissions budget for 2022-25, is required by the end of 2021 under the Climate Change Response Act. Currently, we expect Cabinet to consider the Emissions Reduction Plan in June 2021.

We will discuss the draft Transport Emissions Action Plan with you early in 2021.

Transport planning has started to prioritise reducing emissions in other ways:

- Climate change is a strategic priority in GPS 2021. This will prioritise investments that reduce emissions and help to transition to a low emissions transport system.
- The draft New Zealand Rail Plan outlines the long-term vision for modern rail transit systems in the largest cities and for moving increasing volumes of freight from road to rail.

Advancing work on reductions in emissions from the light vehicle fleet

New Zealand needs to rapidly decarbonise light vehicles. The light vehicle fleet is responsible for more than 90 percent of road travel, and the fleet is almost all fuelled by petrol and diesel.

Methods to decarbonise light vehicle transport in New Zealand are known, so doing this quickly is ambitious but achievable. Done right, decarbonisation of this area of transport can help address inequality, create jobs and improve access.

The immediate opportunity is to accelerate the turnover of the light vehicle fleet to low emissions vehicles. These vehicles will be predominantly electric but hybrid vehicles and low carbon fuels have a role to play.

A rapid, just transition to a clean and safe vehicle fleet requires multiple and coordinated measures. An ambitious Clean Car Standard will be important

for turning around worsening fleet emissions because it would encourage the uptake of clean cars and dissuades purchase of high emission cars.

The policy work on the clean car reforms is mostly completed. The reforms would require legislation and new funding from Budget 2021, so the Ministry will seek your views on advancing them.

We will also advise you on complementary measures to boost demand for low emission vehicles and lift their supply over the short term. These measures will be part of a broader light vehicle emissions package.

International emissions sit outside the Paris Agreement

Emissions from international aviation and shipping are not part of the Paris Agreement or New Zealand's Nationally Determined Contribution. Instead, the International Civil Aviation Organization [ICAO] and the International Maritime Organization [IMO] will address how their sectors decarbonise. Progress has been slow, so there is an opportunity for New Zealand to advocate for these organisations to be more ambitious.

Strong and resilient regional connections

Key points

- In regions, transport is a foundation for communities, a gateway to markets, and essential for social inclusion.
- The needs of cities and regions sometimes differ or compete, so strong long-term planning and sharp investment decisions that balance these needs are required.
- Many regions face funding constraints, especially where local authorities have small ratepayer bases. This raises issues about how the needs of regions will be funded, including making them more resilient, especially to climate change.
- There are regulatory and structural issues around the provision of air navigation and other regional aviation connectivity that need further thought.
- Post COVID-19, there will be further stress on regions. To assist you to prioritise resources, the Ministry will provide advice on what good connectivity looks like for a region and there may be cases where government assistance is needed to maintain connectivity.

Transport supports the economic and social needs of the provinces and regions

Over half of New Zealand's exports come from farming, forestry, and fishing. Before COVID-19, approximately 20 percent of exports came from tourism, with many popular tourist attractions spread around the regions. The freight system is fundamental to moving these goods in the regions.

A well-connected country is vital for the domestic economy, and for people travelling to be with family and friends by road, rail, ferry, or plane.

Road and rail connections to ports and hubs are strategically important because 99.7 percent of

New Zealand's exports travel through maritime ports (about 80 percent of trade value in 2019). With the country's largest ports, particularly Tauranga and Auckland, located in the fastest-growing cities, there are additional complexities to moving freight efficiently to and from ports. For example, investments in state highways through urban areas can help improve freight movements, but can also encourage more urban expansion and car travel.

State highways and local government roads play a valuable role in moving goods regionally and internationally, as approximately 84 percent of freight in New Zealand currently travels by road.

The rail network also plays an important role and will play a more prominent part in the future. More freight needs to move by rail to avoid increasing road traffic and congestion, to support fewer deaths and serious injuries on the roads, to reduce wear and tear on the roads, and to reduce carbon emissions. The strategic investment programme for rail outlined in the draft New Zealand Rail Plan aims to address this priority.

New Zealand also has a network of regional airports and scheduled air services. These aviation services provide essential access to social and economic services and opportunities.

Maintaining regional connectivity is facing challenges

Smaller urban areas and provincial regions face challenges that the transport system needs to respond to, including small and sometimes decreasing, populations that can be widely dispersed. Traditional public transport services, for example, have little utility in rural areas. More innovative solutions may be needed for those in

rural areas who need to travel to access essential services.

Central government has a large influence on regional transport because of its investment in state highways. State highways are 100 percent funded from the NLTF, and government also invests in rail and transport projects from other government sources.

Local government funds and maintains much of the transport infrastructure in regions. Local authorities in rural areas spend a much higher proportion of their budgets maintaining local roads than their urban counterparts. Rural areas also have a smaller ratepayer base to fund local transport infrastructure. Some regions, such as the West Coast, and areas like the Central North Island, have declining ratepayer populations.

Lack of funding is a particular concern in the face of climate change and more extreme weather events. Transport infrastructure can improve the resilience of communities and regions to natural hazards. Events, such as the Kaikōura earthquakes in 2016, illustrate important road and rail connections can be fragile in some regions and the need for alternatives, such as air and maritime connections.

COVID-19 has renewed some concerns about maintaining air services and airport infrastructure for geographically isolated communities that are not within easy reach of medical and other important services. Critical regional connectivity – provided by some regional airlines and a bus operator – are currently supported under the Essential Transport Connectivity scheme, part of the Government’s response to COVID-19 in the transport sector.

You will need to consider how air navigation services are provided, given regulatory and structural issues, and emerging technology opportunities.

The Government may also need to support a broader set of connections than have traditionally been supported, such as air connections for some regions. To assist you, the Ministry will provide you with a better picture of what good connectivity means for a region, including how to fund it.

A more strategic approach to New Zealand's supply chain

Key Points

- Supply chains are critical to New Zealand's economy and are a portal to markets for industry, producers and communities.
- The supply chain system is market-led and driven by commercial imperatives, although central government plays multiple roles, including as a supplier of transport infrastructure and an investor in rail services through KiwiRail. Local government also has a significant role through port and airport ownership and local roads.
- The supply chain is high volume and low margin, and there are tensions between the variability of market demand and the long-term nature of capital investments. Government creates value by providing certainty.
- Supply chain operators have generally weathered COVID-19 well, but international air freight has needed significant and unsustainable levels of government support. There are emerging pressures on sea freight from congestion issues at the Ports of Auckland.
- Longer term challenges over the next decade include a global and local recession which may have a significant impact on patterns of demand and drive consolidation of operators, and the need to decarbonise the system. COVID-19 has also brought to the fore the need to engage internationally to support and maintain open supply chains in times of global disruption.
- We need to continue to monitor the international environment as well as our domestic environment to anticipate any structural changes and whether government needs to do anything to support the sector.
- The Ministry will seek your views on your strategic priorities for a supply chain strategy and on the process for taking it forward. The supply chain system can only operate at its best as a fully integrated, multi-modal system. A broader supply chain strategy would provide value to the market, the economy and communities and, in particular, could help resolve the future configuration of our largest ports in the Upper North Island.
- A strategy, developed collaboratively with the sector, is also an opportunity to lock in a constructive relationship between government and the sector reflecting their shared interests. Working with the sector to respond to COVID-19 has highlighted the value and potential success of this approach.

The supply chain is vital to economic prosperity

New Zealand is a small trading nation that depends on reliable connections with global markets. These include strong international connections through air and sea ports, and domestic connections that deliver freight to local markets and move export goods from producer to port.

Supply chains are central to the prosperity of regions, providing a gateway to markets, and supplying cities.

Central government plays multiple roles in the supply chain. The Crown is a shareholder (through its interests in KiwiRail, New Zealand Post, and Air New Zealand), it builds and maintains crucial arterial infrastructure, provides regulatory settings for the market and sets the parameters within which the sector operates.

The freight system serves a range of markets

The freight system ranges from high speed and high cost air freight through to lower speed and lower cost shipping services.

While shipping dominates international freight, road freight is by far the dominant mode for domestic freight, moving more than 90 percent of tonnage and three-quarters of tonne-kilometres. These metrics reflect the greater volume carried by road, but the longer distances travelled by other modes.

The supply chain is market-led and driven by commercial imperatives. It is naturally inclined toward greater efficiency, as freight users seek the mode that delivers the lowest cost, greatest reliability, and best fit for their needs.

New Zealand's system is characterised by:

- high freight costs, driven by geography, small market size and dispersed economic centres
- a highly competitive freight industry with a large number of operators
- high volume, low margin operations across the system
- the tension between short-term planning in a changeable operating environment, and the long-term nature of capital investments.

Government has a role in navigating complexity and providing certainty

New Zealand is a small, open economy that is sensitive to changes in the international environment. Any changes can have a real impact on freight operators, who need certainty to manage their businesses and face the challenges that come from navigating local conditions, as well as those internationally.

The Government can help to provide some certainty and predictability by proactively engaging

the international organisations that establish the framework of international transport standards, for example, the International Maritime Organisation, the International Civil Aviation Organization, and the Asia-Pacific Economic Cooperation Forum. Government has a role to play in shaping international transport standards, and responding to changes to protect and promote the interests of New Zealand and its supply chains.

Closer to home, government has a view of the broader system and New Zealand's environment that allows it to identify trends and patterns, and build a picture of potential future freight demand. This provides certainty that is valuable to the market, and to government's own role in system planning.

Local government also has an important role to play through port ownership and its role in planning local and regional urban environments, and transport planning for both freight and people. Central government must work closely with local government.

The Future of Rail Review and the publication of the draft of the first New Zealand Rail Plan are important developments for providing certainty to the market, and how central and local government needs to work together. Freight owners base their mode choice on a variety of factors, including price, timeliness and reliability. Rail freight is often not chosen even though it can be a lower cost and lower carbon option than road freight. Moving freight from road and to diesel rail reduces emissions by 70 percent. KiwiRail's freight business has been constrained in the past by an uncertain future and lack of investment in core assets. The Future of Rail Review sought to provide greater certainty for rail by defining its role and what needed to be done to fulfil that role.

Other initiatives that are completed or underway include:

- the Green Freight project, which identifies emissions reduction opportunities for the long-haul road freight sector
- GPS 2021, which makes freight an explicit priority, allocates funding to coastal shipping and rail, and governs work underway by Waka Kotahi on a National Road Freight Strategy
- work on how the Government can provide greater support to the coastal shipping industry, including through a \$10 to \$15 million annual allocation in GPS 2021
- initiatives in specific places, such as the Auckland Freight Plan
- the International Air Freight Capacity scheme.

The outcome of the Future of Rail Review is a resilient and reliable rail system

The outcome of the Future of Rail Review is a sustainable longer term planning and funding model to allow rail to play a greater role in the transport system. The Review resulted in the funding and planning of the rail track network being brought into the land transport planning and funding framework.

The draft New Zealand Rail Plan was also developed and engaged on alongside the draft GPS. The Rail Plan is designed to guide long-term investment decisions for the rail system alongside the GPS, from both the NLTF and Crown budget decisions. The Plan is ready for release, subject to your approval and confirmation of your rail investment priorities.

Issuing the Rail Plan will create certainty about the Government's investment priorities in rail and the need to bring the core network up to a reliable and resilient state. It will guide investment decisions in rail under the GPS and for future Crown investments.

Spotlight on the Value of Rail

The total economic value of rail is \$1.47 billion - \$1.54 billion every year.

The total value comes from:

- \$1.3 billion in reduced congestion
- \$8.5 million in reduced emissions
- \$60 million in improved safety outcomes
- \$63 million in reduced road maintenance.

[Source: The Value of Rail, EY for Waka Kotahi (2016)]

The first phases of the remedial funding to achieve a resilient and reliable rail system have been provided through the NLTF, the 2019 and 2020 Budgets, and the New Zealand Upgrade Programme. KiwiRail has also received funding from other sources to fund additional Crown projects, such as through the PGF to support regional economic development outcomes.

Implementing the Review successfully and supporting KiwiRail to deliver on its significant capital programme will require a collaborative approach from all the involved transport agencies. It will also require you to work closely with KiwiRail's Shareholding Ministers. We will brief you on the Future of Rail Review and upcoming decisions, including confirming your investment priorities through issuing the Rail Plan.

A supply chain strategy creates opportunities

The supply chain can only operate at its best as a fully integrated, multi-modal system. It will have to navigate many challenges over the next decade, including a recession and recovery, and decarbonisation. There is potential to develop a

more considered approach to supply chain issues through a supply chain strategy.

Building a supply chain strategy is an opportunity to make deliberate choices on:

- how to leverage the strengths of each section of the freight market
- how supply chains can support moves to reduce transport emissions
- how the sector develops and grows to take account of the desired future shape of the economy
- how to prioritise investment across the import and export parts of the system
- the role and contribution of major assets in the system (like ports) and how these are considered in the context of the broader system
- how to use international engagement to support New Zealand's supply chains and the freight industry.

Context is important. The Upper North Island Supply Chain Study completed for the previous Government by an independent working group in 2019 highlighted the complexity of planning the future of a single asset within a complex system. Deciding the future of a port is straightforward if the sole concern is capacity. However, this question becomes more complex when considering the port's role in the local and national economy, impacts on the system around it, contribution to New Zealand's economic strategy, and questions of social licence. The Ministry will engage with you on how you would like to take forward the work on the future of Auckland's port.

The Government has levers it can use to influence the system, but there are risks that some of these distort the market. Two strong levers at central government's disposal are planning and investment. Providing longer-term certainty about what infrastructure government will deliver and maintain is an effective way of shaping the system.

The new planning framework from the Future of Rail Review and draft New Zealand Rail Plan are first attempts at using planning and investment signals to deliver certainty. These are important developments and learning from them will help to inform government's participation in the supply chain system.

A supply chain strategy may look different to others, because the government is one of many investors and operators

COVID-19 has highlighted the interdependencies between government and the supply chain system, encompassing efficiency, resilience, and environmental sustainability. The pandemic has also demonstrated the need to coordinate internationally to keep supply chains flowing, especially during times of global disruption, and to work constructively with operators to pursue shared goals.

The disruption caused by COVID-19 was a 'worst case scenario' of potential short-term shocks that can affect the system, and the sector has demonstrated its ability to adapt. Whether these adaptations are temporary and there is a "return to normal", or they persist and a "new normal" emerges, will become clearer as the world moves to recovery. As global players adjust and settle on what the "normal" will be after COVID-19, New Zealand needs to maintain a seat at the international table to safeguard the country's interests.

Some short-term adaptations, such as providing funding for airfreight capacity, are not sustainable in the long term. If short-term changes to travel patterns persist, decisions will soon need to be made on how to approach the sectors of the economy that are configured to now-unsustainable supply chains.

While sea freight has not been as seriously disrupted by COVID-19 as air freight, there are some pressures on sea freight with severe congestion occurring at the Ports of Auckland. This is having flow on impacts on the wider freight sector by affecting transshipments along New Zealand's coast, putting pressure on rail networks, and leaving our exporters short of ships and empty containers to move their goods offshore. It will be important to assess if the congestion issue is a temporary, seasonal occurrence or if there are longer term structural forces at play.

Maintaining the relationships that have been established with the sector over the course of the pandemic is important. By working collaboratively on improvements in efficiency, resilience, and environmental sustainability, government can better position the system to navigate change and uncertainty over the short and long term.

We will engage with you on the priority you want to give to a supply chain strategy, and how you would like to shape it.

Managing disruptive events and transport security

Key points

- Over the last decade, New Zealand responded to and recovered from several disruptive and extreme events, including three major earthquakes, a series of significant weather events, a volcanic eruption, a major terrorist attack, and COVID-19.
- The Ministry is the transport system steward for emergency management and national security, and has led the overall transport sector response to these events. This work is complex and resource intensive, often requiring other priorities to be delayed. However, the inter-agency transport response to events is increasingly seen as efficient, fast and effective.
- The Christchurch terrorist attacks have highlighted some areas for improvement for transport security and there is a work programme underway to address these areas.
- There is also a need, as part of the transport climate change work, to consider how New Zealand manages long-term adaptation and sustainability challenges.
- As Minister of Transport, you are lead for the Maritime Security Strategy and introducing new maritime powers legislation is a priority for the next term. The legislation changes will make it easier to deal with crime in international waters.
- COVID-19's fluidity, the risk of rapid resurgence and the dynamic global environment, means the Ministry needs to be prepared to operate in overlapping response and recovery modes for some time yet.

The Transport Portfolio and the Ministry have a central role in emergency management and national security

The Ministry's emergency management and national security work involves four strategic roles [the 4Rs]. These roles are:

- reduction - working with partner agencies to make the transport system more resilient to, and secure against, disruptive events [e.g. adjusting the settings for aviation security or improving the resilience of transport infrastructure to natural hazards]
- readiness - preparing for disruptive events, which includes training, developing systems and processes, rostering, and coordination
- response - responding to a disruptive event by providing information, data, and advice
- recovery - developing and implementing policies and processes to help regenerate transport systems, including learning lessons from the event to help systems recover so they are more resilient to [or more secure against] future events.

New Zealand's resilience and security has been tested in a variety of ways over the past decade. These events include the Canterbury sequence of earthquakes from 2010-2014, the Rena oil spill in 2011, the Kaikōura earthquake in 2016, the 2017 Ruakaka pipeline failure, the Christchurch terrorist attacks and Whakaari-White Island eruption in 2019, a number of extreme weather events, and the emergence and resurgence of COVID-19 in 2020.

All of these events have affected transport networks requiring a system-wide response. A well-functioning transport system has been indispensable for restoring communities and business activity after the emergency phase is over. In some cases, Cabinet may approve financial support for transport sector recovery. When this happens, the Minister of Transport is typically delegated authority to oversee the use of these funds. As the need arises, the Ministry will brief you and support the monitoring of this function.

When an event occurs, the Minister of Transport may be invited to the Cabinet Committee for External Relations and Security (ERS). This committee has oversight of national security matters [in addition to foreign affairs matters], and has the Power to Act [where required] during a national crisis.

During a response, you will receive situation reports from the Transport Response Team [led by the Ministry].

Our emergency management response role involves event response [i.e. providing information, data, advice and policy], training, developing and documenting systems and processes, rostering, and coordination to maintain the readiness of the system.

This work is complex and resource intensive, often requiring other priorities to be delayed by the Ministry and agencies. However, the inter-agency transport response to events is increasingly seen as efficient, fast and effective.

There are challenges in balancing the 4Rs [reduction, readiness, response, and recovery]

In some cases, the recovery phase after an event can be relatively quick. For example, Waka Kotahi and local government are accustomed to fairly routinely addressing landslides that temporarily block sections of road. In many of these cases, access can be restored within hours or days.

However, some events require a much longer-term recovery. For example, the 2016 Kaikōura earthquake closed the transport corridor for both road and rail for up to 18 months. Reopening works were successfully delivered by KiwiRail and Waka Kotahi, with associated resilience works due to be complete in December 2020.

Full recovery from COVID-19 is expected to take years so there is a possibility that an unrelated event could occur during recovery. As a result, the Ministry needs to be ready to respond to another event or events, even while the focus is on New Zealand moving between COVID-19 response and recovery.

The Ministry also needs to continue work to reduce the probability and consequences of disruptive events to improve the resilience of the transport system [and national security more generally].

Transport security will remain a significant focus

Some recent events, such as the Christchurch terrorist attacks, have tested transport regulatory systems and operations. In response, the Ministry, together with the transport agencies, set up a cross-modal transport security working group and supporting work programme. This approach gives you to have greater oversight of the security of the transport system, and ensure that the Ministry's work fits into the government's broader counter terrorism and violent extremism framework.

The transport security work programme is designed to ensure that - across the transport network - systems, people, services and infrastructure anticipate risk where possible, limit any adverse impacts, cope with the effects, and adapt or even thrive in the face of change. Through this work programme, we will advise you on how transport can address any relevant recommendations coming out of the Royal Commission of Inquiry into the Attack on

Christchurch Mosques, which is due to be published in late November 2020.

The work programme will allow you to view, at a glance, key initiatives by mode. For example, the proposed Civil Aviation Bill contains some improvements to aviation security settings, and there are other initiatives underway with the Civil Aviation Authority to improve aviation security settings and infrastructure. You will have the opportunity to champion these initiatives when they are brought to Cabinet, and introduced to the House.

While COVID-19 has had a major impact across government in terms of delivery timeframes and resourcing, this work is just as important now as it ever has been if the system is to be improved, especially as threats can occur domestically as well as internationally.

Improving maritime security

Keeping the maritime environment secure is a crucial component of New Zealand's national security, given:

- there are 1,000 kilometres of ocean separating New Zealand from our nearest neighbours and more than 15,000 kilometres of coastline
- New Zealand has responsibility for a maritime search and rescue region which covers about 30 million square kilometres of ocean – stretching from Antarctica to the Pacific Islands.

As Minister of Transport, you are lead for the Maritime Security Strategy, which was endorsed by Cabinet in November 2019. We will provide you with a more detailed briefing on the Maritime Security Oversight Committee (MSOC), its proposal to publish the Security Strategy and options for resourcing its implementation.

The MSOC and the Maritime Security Strategy provide cross-government policy guidance on maritime security. The Secretary for Transport

chairs MSOC, which includes 11 agencies under the National Security System.

The Maritime Security Sector expects the impacts of COVID-19 will amplify maritime security risks, including issues, such as illegal migration, smuggling attempts and criminality in the maritime domain. Now more than ever, a robust understanding of the maritime environment and the activities that are occurring in it, and the ability to respond to security challenges across a vast area, is a crucial component of New Zealand's national security.

MSOC recommends that you support the introduction of the Maritime Powers Bill to the House as a priority. The Bill would fill a legislative gap in New Zealand's maritime security framework. The Bill would provide comprehensive law enforcement powers to detect, disrupt and prevent criminal activity in international waters, particularly transnational organised crime. The Bill is drafted and ready for introduction. The Bill process is being led by the Ministry of Foreign Affairs and Trade.

Safer transport

Key points

- Central government has a major role in making travel as safe as it can be. This involves regulation, investment and education. Improving the safety of the system prevents deaths and serious injuries, reduces broader social and economic costs connected to these deaths and injuries, and contributes to other outcomes.
 - Improving transport safety requires leadership, a system-wide and co-ordinated approach, and collaboration. Investment in safety infrastructure is needed, and has fallen behind in some areas.
 - There have been some high profile failures in the regulatory system. Lifting regulatory performance and ensuring there is sufficient capability and capacity in the system will be a significant focus over the next term.
 - In the context of economic hardship, you will want to reduce the risk that transport operators cut costs and take more chances with safety. Important this term will be strengthening regulatory approaches and the capability and capacity of the regulators.
- Drugs, alcohol and fatigue continue to be major contributors to road deaths and injuries. There is legislation in the House on drug testing drivers and there is more in the pipeline for testing in the commercial aviation sector.
 - You will be briefed on progress with the current strategy to address road safety, *Road to Zero*. Achieving *Road to Zero's* ambitious objectives will require continued leadership, momentum and a sharp focus on implementation.

You have opportunities to improve safety for people using the transport system

Safety is a core part of the transport portfolio. Travel needs to be as safe as it can be, whether by road, rail, aviation and maritime, or new modes involving new technologies like e-scooters and drones.

Spotlight on the cost of crashes

Road fatalities in 2019	352
Average social cost per road fatality* in 2019	\$4.56 million
Total social cost of road fatalities in 2019	\$1.6 billion
Total social cost of deaths and commercial serious harm in the maritime sector in 2018/9	\$91 million
Total social cost of aviation fatalities in 2018/9	\$59 million

*Takes into account factors, such as the loss of life and the life quality of survivors, economic output and the costs to the health system

Given the high number of deaths and serious injuries, and adverse trends in these numbers over recent years, improving road safety remains important. There are opportunities to improve safety across all modes. There needs to be strong leadership, a system-wide approach, collaboration between road safety partners, and the co-ordinated use of public policy levers like regulation and education. In addition, an understanding of the role that emerging technologies can play in improving safety is necessary, including some of the problems that could result.

New Zealand must invest in safety infrastructure across all transport modes

Sustained investment in safety-related transport infrastructure is vital across all modes. Investment in safer infrastructure (e.g. road safety treatments or maintenance of the rail network) has fallen behind the level needed. There are also gaps in New Zealand's approach, especially where modes like rail and road intersect. You have several ways to influence investment, including your priorities in the GPS.

Regulatory oversight must be risk-based and effective

Transport regulation is managed as a single system across all the modes. However, there are separate Crown transport regulatory agencies and the regulatory approach is customised for specific modes. The Transport Accident Investigation Commission makes system-wide recommendations to improve safety across the aviation, rail and maritime modes.

Overall, the system needs to focus on the areas of greatest risk, and the regulators need the

resources to carry out their role. There also needs to be good alignment with outside regulatory frameworks that overlap with the transport regulatory system like the health and safety at work system. Work is ongoing on how to ensure there is appropriate coordination across these systems and to avoid gaps.

The recent high-profile regulatory reviews of the Civil Aviation Authority and Waka Kotahi have identified areas where there needs to be more investment in capability and capacity for the regulators to carry out their regulatory role effectively. Strengthening the current arrangements will be a significant focus over the next term.

The COVID-19 pandemic makes this work even more important. History has proven that transport operators under financial stress might cut costs and take more chances with safety.

Drugs, alcohol and fatigue continue to be leading causes of transport deaths and serious injuries

Too many New Zealanders are being killed or injured by impaired drivers. Parliament is considering legislation to improve drug driver testing. The Land Transport (Drug Driving) Amendment Bill proposes a new random roadside oral fluid testing regime. The previous timeframe for the Bill, to be considered by the newly formed Government, was for Select Committee to begin considering the Bill in November 2020.

New drug and alcohol requirements are also planned for commercial aviation operators through the upcoming Civil Aviation Bill, subject to confirming your legislative priorities. The Ministry has been working on the Bill to be introduced to Parliament later this year or early next year.

The Maritime Transport Act was changed in 2017 to allow random drug and alcohol testing of

commercial operators in the maritime sector, and a draft rule to put this testing in place will be available for consultation with the industry soon. This rule is likely to need to be approved during the 2021/22 financial year.

Drugs, alcohol and fatigue are also serious risks in the rail sector. All operators on the national rail network maintain employment-related drug and alcohol policies. Employees are subject to pre-employment drug screening, post accident and incident testing and random testing.

Implementing the *Road to Zero* safety strategy will need to be a focus

Until 2013, New Zealand's road safety record was improving, mirroring a trend across many developed countries. From then on, the number of deaths on the roads has been rising. This rise led to a new road safety strategy, *Road to Zero*. While the focus of the previous strategy was sound, a review found there was insufficient leadership and focus on implementation. That strategy also lacked national targets and overall outcome targets, which are needed to maintain focus and allow tracking of interventions and the overall impact of the strategy over time.

The new 10-year *Road to Zero* strategy adopts a vision of a New Zealand where no one is killed or seriously injured in road crashes. Developing *Road to Zero* involved extensive engagement with the sector and nation-wide consultation.

Road to Zero commits government to reduce deaths and serious injuries on the country's roads by 40 percent by 2030. To make that target, implementing the strategy's action plan effectively needs to be a priority for this government term. This will require leadership and commitment to maintaining momentum amongst the agencies responsible for delivering the 15 key actions set out in the initial action plan.

You oversee *Road to Zero* as Minister of Transport. The Ministry will brief you on how the key actions are progressing and the proposed work programme for the next two years.

Rail safety is also critical

There will be opportunities over this term to consider how to continue to improve the legislation, regulation and oversight of rail safety, and to align New Zealand's rail safety approach with international best practice.

The draft New Zealand Rail Plan includes increased investment for the rail network that will improve its safety performance.

Reform of the "40-series" rules and acceding to the Cape Town Agreement

Maritime NZ is reviewing the "40-series" rules that cover ship design, construction and maintenance. It is a key strategic work priority for Maritime NZ. The rules are inconsistent and inflexible, creating uncertainty, delays and unnecessary costs. This is a complex review and will take around three years to complete.

To improve the safety of fishing vessels domestically and internationally, government agreed to accede to the 2012 Cape Town Agreement. The Agreement sets minimum standards for the design and construction of fishing vessels 24 metres in length and over, and the equipment they carry.

New transport rules are needed for accession, and draft rules will be submitted to you in 2021 after Maritime NZ has consulted on them.

A more cohesive and sustainable search and rescue sector

The New Zealand Search and Rescue (NZSAR) Council coordinates search and rescue across land and transport. However, other bodies also carry out search and rescue activities. Significant additional funding, paid for by FED and the Crown, is given to organisations that perform search and rescue functions. NZSAR is supporting these organisations, some of them small NGOs, to efficiently spend the money and ensure delivery of outcomes through Service Level Agreements. A review of the sector is also planned for this Government term to consider how it can be put on a more effective and sustainable footing.

